

Keep All Unnaturalized Foreigners Out of Labor Unions.

During the steel strike in Pennsylvania a few years ago an arms officer stationed in the strike region, in reply to a question by a Congressman, said that he had not been able to than American citizen among the strikers, and some of the Congressmen who investigated the situation, when he returned to Washington told their associates that they had not been able to find among the strikers anybody who keep d understand the English language and the strikers spoke no language which they could understand.

In the recent attack by Pennsylvania miners upon a West Virginia mine, most of the acking party were foreigners and a few days thereafter a large number of women from the Pennsylvania village from which these miners marched went into West Virginia seeking their husbands, but the Associated Press dispatch said that not one of these women could speak the English language.

It was in the light of this condition which has existed for years that the Manufacturers Record years ago urged that no one but American citizens should be permitted to belong to labor unions in this country. The unions seek to use these ignorant foreigners for the purpose of stirring up strife, and are affecting politics by creating the impression of an enormous membership when a very large proportion of the members of some unions are not American citizens and do not know the English language and are simply being used as tools by designing radicals. Once more this situation has become acute and a letter from Mr. Charles E. Hellier of New York, to this paper says:

"There is one other suggestion which is worthy of consideration and that is the passage of a Federal law prohibiting any alien from belonging to any labor union. I recently visited the Connellsville mine district and found that most of the miners making the trouble there are foreigners and aliens, not American citizens, and they neither read nor speak the English language. They should not be allowed to come over here and make trouble for Americans by joining the labor unions."

This is an issue which the country must face. In the first place it must be recognized that we have too many foreigners of that class in this country. Infinitely better would it be for us to make slower material progress than to make progress by destroying the foundation of our civilization in flooding our land with aliens who are alien in thought, in morals and in political views to everything which has made for the safety and the advancement of the United States.

Our immigration laws need to be made more strict than they are. In effect we are letting foreigners get entrenched in order to destroy our institutions and laws. This class of the off-scourings of Southern Europe should be forever debarred from our shores. General Grant's fear expressed forty years ago against the danger of this foreign immigration, which he thought might destroy our nation, has been tremendously intensified since the time when he uttered that warning. If General Grant could have lived to the present day and seen something of the millions of foreigners who through labor unions help to influence the politics and the business interests of this country adversely, he would realize that his fears might soon be fulfilled.

There should be a Federal law forbidding any alien becoming a member of a labor union, and no alien should be permitted to become an American citizen until he can intelligently read and understand the English language. American-born boys are not allowed to vote until they are 21 years of age but the American boy 12 to 15 years of age has far more knowledge of our country and our Government than millions of aliens who without a knowledge of the English language or of our system of government are permitted to become citizens and to vote within a brief time after reaching our shores. The intelligent, well-educated American boy must wait until he is 21, but the ignorant and debased alien can become an American citizen and vote when he is as ignorant of our country, our laws and our form of government as a Hottentot, and by becoming a member of a labor union even the alien exerts a great power for evil in our political and business life alike.



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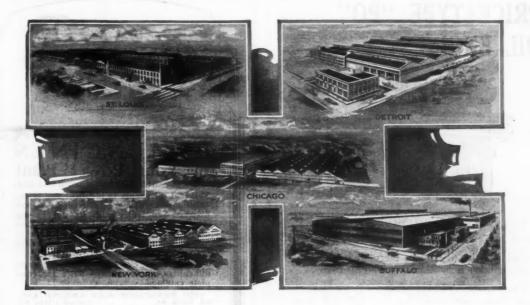
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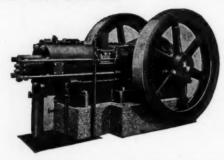
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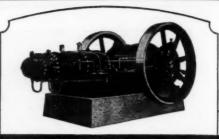
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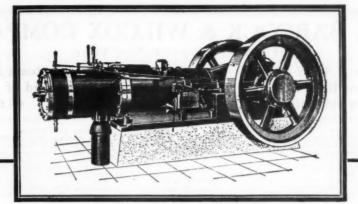


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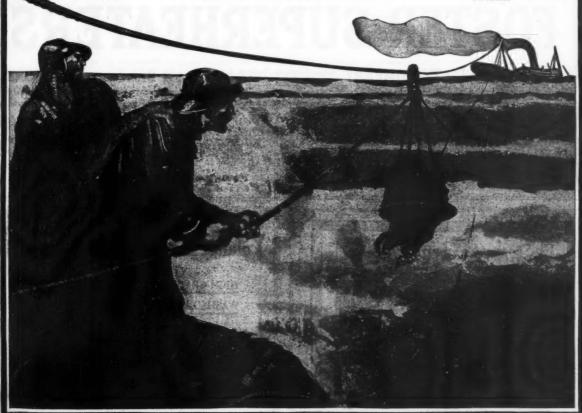
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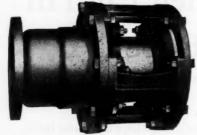
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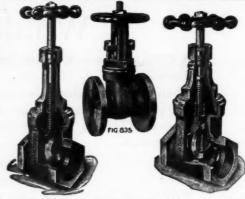


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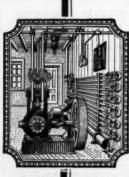
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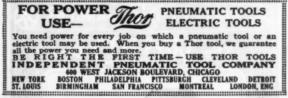
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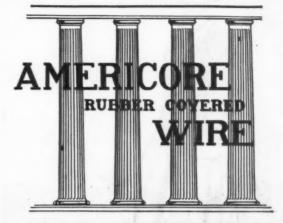
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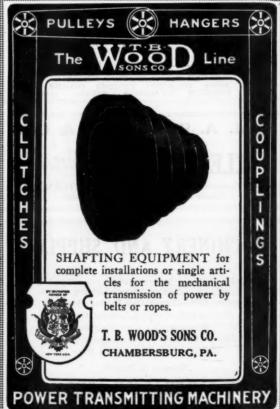
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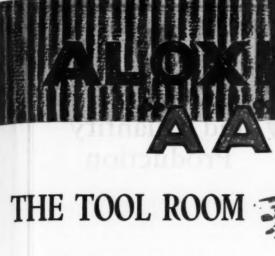
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A derrick boat at Memphis, Tennessee, on the Mississippi River, transferring 75 carloads of Jones & Laughlin steel pipe from river barges to railroad cars for delivery into the Southwestern oil fields. The barges arrived at Memphis eight days after they left Pittsburgh. The distance by river is 1,200 miles.

DURING the nine months the Jones & Laughlin Steel Company's water transport service has been operating, many 1,000-ton barges of steel pipe, wire nails, barbed wire, wire fence, tinplate, blackplate, and structural steel have been delivered on schedule, without accident or delay, to Huntington, W. Va., Louisville, Ky., Evansville, Ind., St. Louis, Mo., Memphis, Tenn., and New Orleans, La. The cargoes in some instances have been destined for customers within the above cities; in others, have been transhipped by rail to interior points long distances from the rivers.

By reason of the economies in transportation costs it brings about, the effect of the service has been to widen the circle in which this company and its customers and in turn their customers are enabled to do business. The benefits have extended through to the ultimate consumers on the farms, in the building trades and the industries of the South, the Southwest and the West.

Unfortunately, this river service must now be curtailed for several months.

There are no locks and dams in the lower Ohio. During dry weather the result is a break in the connection between the Ohio and the Mississippi, as without these installations enough water to float laden tows is never assured.

The J & L June tow went through this stretch of open river on the traditional "June rise". It

was 104 feet wide and 590 feet long—the largest tow of steel products ever shipped out of Pittsburgh. Barges were conveyed to Louisville on the Ohio, and to St. Louis, Memphis and New Orleans on the Mississippi.

The July, August and September tows can go down the Ohio only as far as Louisville, between which point and Pittsburgh the slackwater system is nearly enough completed to enable loaded barges to be handled with some degree of safety during periods of low water.

It is the conviction of men experienced in water transportation, that if the promises made by Congress in 1910, had been kept, namely that by 1922 the Ohio should be canalized from source to mouth, the upper Mississippi deepened, and other work carried out as planned by army engineers, there would be today a great stream of traffic moving in both directions all along our "trunk line" river system, supplementing and relieving our railroads. Huge tonnages of products made, mined or grown in the North and Northwest would be going down river and passing the agricultural, mineral and manufactured products of the South and the Southwest up-bound to fresh markets and wider distribution in the North.

If development to the utmost degree of utility of reliable, low-cost water transportation facilities is worth anything to agriculture, industry and trade; if by the coordination of river, rail and highway, we may have a system for distribution unequalled by any other nation, it behooves all of us to press upon Congress for the earliest possible redemption of its promise of 1010.

nation, it benooves all of us to press upon Congress for the earliest possible redemption of its promise of 1910. Let us not only bring the subject to the attention of our present representatives, but let us ask the candidates seeking election to the House and Senate to give the question study that they may state how they stand with respect to speedy completion of our wonderful inland waterways transportation system.

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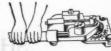
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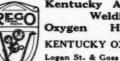
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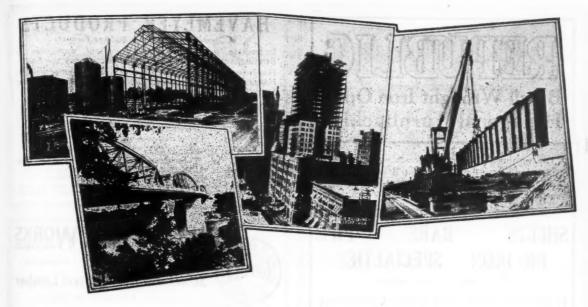


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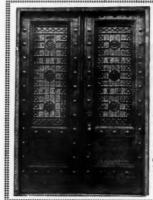
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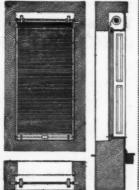
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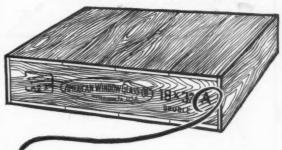
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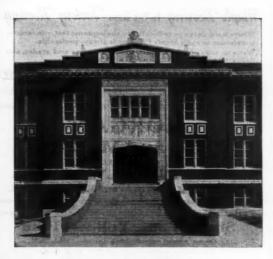
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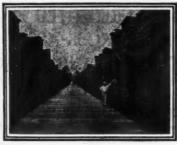
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Arrow indicates Mayari Steel Heat Treated Bolt which held securely while the heavy frog orm was bent in derailment.

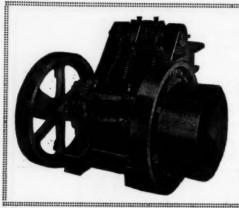
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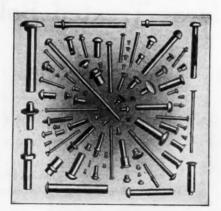
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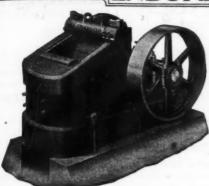
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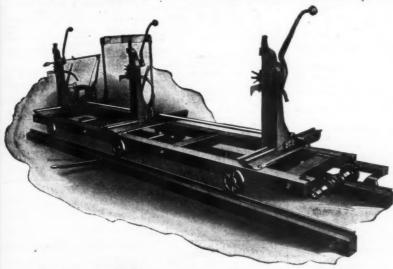
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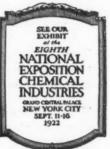
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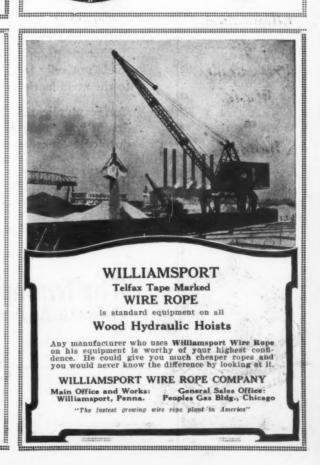
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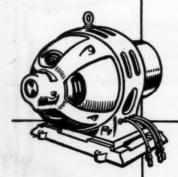
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AUGUST 10, 1922.

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COMPROMISE IS A CRIME.

THE immediate reaction of the sober elements of the country to the decision of the railway executives in New York on the question of seniority was: Thank God that there are still men left who, like Luther of old, have imbedded their purpose in the concrete of principle! The great public is tired of yielding, worn out with unnecessary compromise, sickened unto death with the endless substitution of expediency for principle. "Here I stand. helping me, I can do no other." So have men been burned at the stake, so have they suffered in the torture chambers, that we, their posterity, might enjoy the fruits of their stern adherence to the fundamentals of order and social stability.

It may be true that by intimidation and coercion returning union men, in any case, would settle the seniority question by driving non-union men out of their jobs. Expediency supports harems of sophists, servants apt in the employment of clever phrases and skilled to make the worse appear the better reason. But there come times and issues when to yield one iota is to betray the pledges which society has exacted of those to whom, in full responsibility, it has entrusted for safekeeping the heritage of our social system. Grover Cleveland was going to see that the mails moved even if he had to call out the entire regular army to send a postal card to California. So much for one cent? Aye, and the breasts of school boys swell with pride when first they hear "Millions for defense, but not one cent for tribute!" Almost anything is better than another Adamson Act. Almost anything is better than a new surrender of sovereignty to a coalition of citizens who assert that they are more powerful than Government,

There is a grave likelihood, we regret to say, that the power of the Government is going to be used to compel a compromise, rather than to enforce the law. The railway

executives may be overpowered. Ways and means are being sought by the Government to bring about such a result. And a part of the press, longing for peace at any price. is supporting that method. It is madness.

We have pointed out at various times that it was an absurd situation for such powerful establishments as the Interstate Commerce Commission and the Federal Reserve Board to be independent of an Administration, and able, therefore, to imperil or destroy the deliberate policies of the Chief Executive. We also pointed out, a year ago, that President Harding, appreciating this situation, had so maneuvered as to gain control of, first, the Federal Reserve Board, and, secondly of the Interstate Commerce Commission. The latter, for instance, is at present simply putting into effect a program mapped out for it by Secretary Hoover. The Administration now proposes, also, to dominate the Railway Labor Board.

This situation has peculiar elements. It must be remembered that Congress declined to give to the Board any authority to enforce its decisions. The point was long contested and bitterly debated and the decision was against giving the Board a club. But now the President has stepped into the case and he has succeeded in binding, not all, but one section of the railway labor unions, to agree to accept hereafter the decisions of the Board as final and compelling. The railroad executives have agreed to the same thing. So, extra legally, by a form of coercion, the Board has been endowed with an authority that Congress declined to let it have. In such circumstances, it becomes one of the most powerful agencies of the Government and can settle any railway strike. It can and will, it appears, intervene in the question of seniority, and the influence of the Administration will determine its decision.

We have always believed that if we are going to have wage-fixing and price-fixing commissions they ought to be to some extent under Administration influence, capable of being used, within reason, to further Administration policies, but we are getting mighty near the end of the rope when we undertake to give such commissions far-reaching powers, specifically denied by Congress, merely because it is temporarily expedient so to do. And the danger is enhanced by the fact that the Railway Labor Board happens to be engaged in attempting something that is economically impossible. This is a vast country, with living conditions in its several parts widely variant. Wage-fixing, therefore, on a national scale is an example of centralization run mad. It is destructive of that local management which is absolutely requisite if the different sections of the country are to prosper. - 1

Moreover, there cannot be national wage-fixing unless there is going to be national price-fixing. And if there is wagefixing in the railroad industry, there will be wage-fixing in the coal industry. The road leads to guaranteed wages for everybody. It is a beautiful dream, this progressive socialism, but far-seeing men, visioning the outcome, are

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somewhat appalled at the thought of turning over to politicians, whose inefficiency has become a byword, management of all industry. Why need Lenine spend money on propaganda? His ostensible antagonists threaten to outrun him on his own proposition.

We know that the responsible industrial elements are wholly opposed to the attitude of the Administration in its efforts to compromise an issue that is not compromisable. We believe that the great agricultural interests, which are the very background of national stability, are utterly disgusted with a repetition of the popular pastime of trading off their prosperity by permitting organized labor on the railroads and elsewhere to exact tribute. Agriculture cannot survive additional subsidization of railroad workers. Agriculture cannot afford to support industrial workers who decline to give value received and insist on premium wages and wage conditions. Indeed, if that is the system that is to be made permanent, the country will have to admit that farmers are entitled to guaranteed prices for their crops and assurance against loss.

The regulation of rates by the Government has been a failure. The regulation of wages by the Government is and will be a failure. Both alike are destructive of competition and efficiency. The whole machinery of transport has been hog-tied for a generation. The financing of proper improvements has been an impossibility. The equipment is not sufficient to handle the normal business offering. The enormous advantage this country enjoyed on account of low rates has slowly been sacrificed. Initiative in railroad management has been destroyed. Worse still, the nationalization that regulation has brought about has given the unions the club they wield so unsparingly, namely, the power to attack the whole system of transport at one time.

This crisis, in coal and transport, would be worth all it costs if it led to an abolition of the rate-making and wage-making powers the Government now enforces and brought about a return to free competition and individual management. But the bureaucrats have no intention of permitting so desirable a thing as that. They plan instead, it seems, to force by coercion a settlement of the rail strike, and to follow that by the creation of some sort of fuel tribunal which will bring the coal industry also under the withering control of the Government and ultimately destroy free labor in non-union territory. Only the vigorous and vigilant antagonism of men who can tell truth when they see it and love their country will prevent so undesirable an outcome.

The President, we believe, has no proper function in this situation except one, namely, to comply with his oath of office and maintain law and order. When he goes further, when his subordinates are permitted to dig up technicalities which will give them some sort of justification for evading the plain intent of the law, some trivial excuse for the employment of extra-legal methods and usurpation of authority, no wonder that lawlessness, emboldened, struts defiantly about the country. Expediency makes the Government a bootlegger; expediency makes the Government an apologist for national banks that arrogantly establish branches in defiance of accepted practice; and now expediency is invoked to justify a treaty of peace with organized law-breakers! Government does not tell them what they must do; they tell Government what it must do!

There are millions of citizens who protest, in indignation, and they will later make that protest good in the ballot boxes.

We doubt if the Government could mine coal so successfully as the union leaders have mined the Government.

HOW ONE GOVERNOR MEETS THE COAL CRISIS.

"SHALL the inherent and inalienable rights of man to earn his bread and support his family by honorable labor be denied because a meagre minority, selfishly struggling for power, decrees otherwise?" asks Warren T. McCray, Governor of Indiana, in a ringing statement to the public, headed, "Time for Action Has Arrived," and declaring "that these conditions will exist only so long as it takes to put machinery in motion to produce coal under state supervision."

"There is less than 1 per cent of our population directly responsible for the production of coal," stated the governor, and "while the purely technical and local question of whether the operators and miners meet in state or interstate conference is being settled, I propose that the rights of the 99 per cent of our citizens shall be protected."

"Coal is a basic necessity of our modern civilization and it is the duty of the state to see that it is supplied," he declared, adding, "The question is now, shall the rights of the 99 per cent of our people, not directly responsible for the production of coal, be completely ignored? Have we reached a point where we are tied, helpless and powerless, by a negligible minority in a matter of such grave concern and of such universal importance? Is our boasted freedom and liberty a sham and a farce, subservient only to the autocratic demands of a few?

"As chief executive of the great state of Indiana, answering for the 99 per cent of our citizenship, I propose that the rights of the 99 per cent of our citizens shall be protected."

This statement squarely hits the crux of the railroad and coal strike situation. The call for coal for threshing, canning and harvesting operations is constant and insistent. Cities and towns depend largely upon coal to provide water and to generate current for light and power for the operation of industries that give employment to hundreds of thousands of persons. The railroads must have coal to operate locomotives to bring food products and coal itself to the cities. The coal supply of the countries is being depleted. Winter is approaching. Industry is threatened.

As the Governor of Indiana said, "The time has come to test whether these conditions must be endured because the coal producing agencies as now organized refuse to function together."

It then is a time for every man and woman throughout the country to pledge to the President of the United States, to the governors of the states, and to all Federal, state and county and city authorities and public peace officers their full aid and support in behalf of law enforcement for the perpetuation of public rights and for the absolute freedom of every citizen to work at any lawful occupation, without hindrance from any source whatever.

GOLD ALONE NOT ALL SUFFICIENT.

R. PAUL WARBURG, whose German ideas of a proper M financial system seems to have prevailed in the organiztion of the Federal Reserve System, is credited in a newspaper interview with the statement that the salvation of the world depends on a return to the gold standard by the European nations. Many of us would have supposed that hard work, frugality, wise government and the practice of those virtures which heretofore have made rations prosperous might have something to do with European rehabilitation, but apparently some financers have the idea that gold is all that matters. Croesus, king of Lydia, reasoned the same way, but by so simple an expedient as drawing up a line of camels, whose to the governors of the states, and to all federal, state and an end of Lydia and its gold era. The precious yellow metal has its uses, but it should be the servant, not the master, of men. e: 30 V

Prosperity and Primacy of America Threatened by Wanton, Vicious Propaganda of Free Traders.

N EVER, we take it, in the long history of tariff legislation has the fight against the American system of protection been more subtly, more viciously or more wantonly conducted than in recent months. We do not know how it is that the most selfish interests in the nation, the importers, have been able to blind the eyes of those who should be able to see clearly, but the fact remains that the virus of free-trade has been injected, apparently, even into the veins of the elect, and men who were put into office because they were supposedly pledged heart and mind to the protective system have been beguiled by the loud crying of the metropolitan press into compromises of all sorts. Some of them, we understand, secretly and by night, have even sought to chloroform the very measure which their own party is under sacred warranties to enact.

It is but natural that the metropolitan press, particularly in New York, should seek the abolition of protective barriers. That city is a great importer, a center of distributing agencies. Not only are its financiers heavily involved abroad, but its department stores and its importing wholesalers, waxing fat by distributing the pauper products of Europe, grow rich by their exploitation of the American market, which belongs by right to American manufacturers. They would wring the neck of their golden goose, for iterate as they will the old fallacy that others will not buy of us unless we give them free access to our markets, there is one great truth they never mention and that is that a great American market exists only because production in America is kept profitable. There is only eventual bankruptcy for the whole nation when we allow poverty products to drive out quality products.

The nation is told that conditions have changed much since the last Presidential election, and that the need for protection is not now what it then was. Let none be deceived by propaganda of that sort. Bankrupts are cutthroat competitors. They are inevitable destroyers of legitimate business. They spread, as it were, the germs of failure into every land they enter. Solvency cannot be the bedfellow of insolvency and escape contamination. The danger to American enterprise is not less than it was two years ago; it is greater.

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We have in Congress many men who have not even learned the alphabet of national solvency. They are intoxicated with the sounding phrases of the text book writers, dreamers of dreams, reasoning in terms of the ideal and forgetting that this is still a practical world, in which men and nations get what they do get only by wise struggle, by sturdy defense of their rights, by statesmanlike protection of their own essential privileges. Only recently, to illustrate, the eminent junior senator from Massachusetts had the intellectual impertinence to rise in the Senate, and deliver through the newspapers, a terrific attack on the proposal of the Republican agricultural bloc that the farmers of the United States be given some protection. We say it was intellectual impertinence, for the whole history of tariff-making in America has

been the story of special protection for New England. Its factories have revelled in protection even under an Underwood bill, for while that piece of legislation declined to afford protection of any sort to products of the South and aimed at the entire destruction of the sugar industry, it did give, so the record shows, abundant protection to New England. Here is Senator Walsh representing a constituency that has waxed fat at all times on wise protection, and we hear no outbursts, of indignation from him because the people of the South and West for years paid, by his logic, bounties to keep New England mills prosperous, but he almost bursts in protest at the suggestion that New Englanders might have to pay a few cents a year more for food in order that American farmers have a fair show.

Another group of senators shout to the housetops that men such as Senator Gooding are beyond the pale because they demand a tariff on wool and are themselves sheep-growers. Is not Senator Smith of South Carolina a grower of cotton and has there been any protest that he has devoted himself while in office to efforts to improve the status of the cotton industry? His constituents send Senator Gooding to Washington because he knows the sheep industry and what it needs. For him to recuse himself, on the ground that he personally is interested in the prosperity of the sheep industry, would be for him to betray his trust. All senators ought to be interested in national prosperity. We detest hypocrites, even if their excuse is that they are playing politics. How dare any senator who has fought for cotton object if other senators fight for wool? And yet a number of people, ill-informed, have jumped to the conclusion that Senator Gooding and his friends have been unethical. They are, instead, entitled to applause. Particularly so members of the Republican agricultural tariff bloc, many of whom have devoted real and sincere effort to the protection of Southern industries that were deserted by Southern senators.

It is said the Republican party will lose the elections if it passes the tariff bill. It will be snowed under if it does not. The Emergency Tariff Act has saved more than one whole state from general bankruptcy. Informed men know it. The Underwood law had this country in the throes of the worst industrial panic it had ever known when the great war intervened to counteract its influence. And if the Underwood law is permitted to remain on the statute books, again will the soup houses be the Meccas in our cities. Let politicians beware lest they mistake the shouting of some large newspapers as the voice of the people. The elections show that the people, in fact, are doing their own thinking. And one of the things they are thinking is that a Congress which fails to protect them against the most menacing competition they have ever known is a worthless Congress, too cowardly or unintelligent to warrant further support.

It was, we think, a calamitous thing that Republican leadership ever surrendered the principle of American Valuation. To our own selves be true. But propaganda, faise and misleading, apparently overturned it, and a panicky Senate was

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afraid to do the obviously right and proper thing. We are in danger, therefore, and our prosperity is menaced, even if the present bill becomes a law, for undervaluation and cheating at the customs houses will continue. But, under the new law, we shall have a fighting chance. That is better than continuing to play the role of Little Red Riding Hood.

We are by no means satisfied with some features of the bill. As Wallace's Farmer has said, if we are going to have free non-edible vegetable oils the farmer is sort of trapped. But we do not believe the House will accept free vegetable oils of any kind, or that the President will approve such an inexcusable sacrifice of the nation's underlying industry. Nor can we find it possible to explain the senator's vote in favor of turning the American dye industry, essential in the national defense, over to the German cartel. There are inperfections to the bill, but glaring imperfections are not those of too much protection; they are those resulting from a coalition of free-traders with selfish manufacturing interests and therefore giving too little protection. With the South, in tariff matters, represented by economic infants who vote for lower rates just because they are lower, and with Southern senators actually voting against the interest of their own vegetable oil producers in favor of the great soap companies, it is rather remarkable that agriculture has been able to secure any benefits at all. Southern votes rally to keep the South poor. They veto prosperity, so far as they are able.

Tariffs are the bulwarks of forward-moving nations. The American tariff system, transplanted to Germany, was making Germany the leading industrial nation on earth. The tariff permitted the development of the mighty American manufacturing interests that saved the world for civilization. Without tariffs, we should today be a second-class nation, buying our manufactured goods from abroad. We should be, as all purely agricultural and free-trade nations have been, "meanly prosperous." Let us keep to the charted channels. Let us hold to the principles that have made us great, in economics and in morals. Let the Congress not be bulldozed, fooled or scared into vetoing national prosperity. It has no duty at this time more sacred and more imperative than the passage of a protective tariff measure.

ENGINES AND CARS IN GOOD SUPPLY ON THE RAILROADS.

NOTWITHSTANDING the strike of union employes in the railroad shops throughout the country, the railroads announce their ability to keep well supplied with engines and cars, says the Association of Railway Executives:

"Representatives of the striking railroad employes are attempting to arouse public concern over the alleged enormous impairment in the condition of motive power and cars of the railroads. * * * The stories to the effect that a thousand locomotives are falling out of use every day are ridiculous. On July 15 of this year, two weeks after the strike began, there were fewer locomotives in bad order than on February 1, March 1, April 1, May 1 or June 1."

The number of locomotives in bad order during the past year, according to data accompanying this statement, is shown to have varied from 15,437 on July 1 of last year to 15,643 the next month and then down to 15,471 in October, up again to 15,790 in December, down to 15,383 in January of this year, up to 16,297 in March, from which point there was almost a continuous decline until July 1 when it was

14,424 and on July 15 it was 15,764, or nothing like as great as several times during the months when there was no strike.

In the case of cars, the number in bad order has been continuously excessive ever since Federal control of the roads and it is further stated that the inability of the roads to earn even operating expenses during part of last year "coupled with the resistance of the men now on strike to any reasonable reduction in wages, made the adequate maintenance of the cars of the country financially impossible over a long period. Bad order cars on July 1 numbered 324,583 and on July 15, 342,078, an increase of 17,495, not abnormal in view of the traffic."

These figures show that the railroads, in spite of the pressure of business upon them as demonstrated by the statistics on car loadings each week, are in fact holding their own and in addition are strengthening their shop forces every day both by new men as well as by union employes who have returned to their jobs.

FORECAST OF A SMALL COTTON CROP.

A SHORT cotton yield of 11,449,000 bales is forecast by the Government crop report issued last week. The average crop for the past ten years was 13,053,000 bales. While conditions will fluctuate there seems to be no reasonable ground for expectation that final reports will be more favorable. While growing conditions are reported as good in many sections, the future ravages of the boll weevil can never be reckoned with, and weather conditions of drought or excessive rain or heat many also greatly modify the final yield. As a guide to the probable number of bales which will be harvested, a crop forecast of cotton put out in July is of small value and not at all dependable.

The Government report shows the important cotton growing state of Georgia at the bottom of the list, with a condition rate today of ..54, compared with a ten year average of .71.

Generally speaking, the states west of the Mississippi river show the highest conditions in this report. Thus in Texas the plant is up to its decade average of .72, the same as was reported last month. Oklahoma lost one point, but Arkansas gained one point and the prospect in the Southwest is above the average.

Abandonment of acreage is one factor in the small crop prospects. A special report says that on July 25 the abandoned acreage was a little more than seven per cent of the area planted, and this would show a further reduction of 750,000 bales from the forecast.

Seasonal conditions during August are commonly unfavorable to cotton growing. It would be phenomenal if the month resulted in a gain or even a maintenance of conditions for the crop. Georgia has suffered from an excess of rain, but in the western parts of Texas and Oklahoma recent hot, dry weather, the temperatures being sometimes over 100, has threatened damage to cotton. However, good showings have been made in North Carolina, Alabama and Mississippi, so that the loss during the month from June 26 to July 25 was but 4 of one per cent. On the other hand the cotton boll weevil is expected to do great damage this month, from 71 to 80 per cent of the cotton region being infested.

According to the outlook, with an estimated consumptive demand for at least 13,000,000 bales of cotton, the growers will doubtless obtain good prices for cotton this year. At best the yield does not promise to anywhere near meet the world's cotton requirements.

Maybe one trouble is this: The administrative branch of the Government is trying to give the Railway Labor Board the power to enforce its decisions which Congress deliberately declined to let it have.

COMPLETE CENTRALIZATION OF FINANCIAL CONTROL MUST NOT BE PERMITTED.

THERE is a new snake crawling in the financial domain and the time to scotch and paralyze it is now. In branch banking by national banks is the seed of arrogance, the promise of tyranny, the insolence of lawlessness, a conspiracy for centralization and the yoking of the less developed communities to the Juggernauts of metropolitan financiers.

We need not here impress the fact that for sixty years it has been the accepted ruling of the Government that branch banking by national banks is illegal. More than twentyfive years ago the Supreme Court of the United States handed down a decision which was then, and has been since, until now, accepted by the laity and the Government alike as prohibiting the establishment of branches by national banks. Repeatedly, at the instance of national bankers, during two generations, attempts have been made to have Congress authorize the establishment of branch national banks. But Congress, in every case, reflecting a vigorous public opinion, has refused to acquiesce in the attempt to establish a credit monopoly. We feel justified in saying, therefore, in spite of the fact that it is now urged that the question of legality is an open one, that the ruling long accepted against the establishment of branches constituted in itself a general prohibition, the reversal of which, unless by specific direction of Congress, is a form of lawlessness which must be everywhere condemned as immoral and Bolshevistic.

We have had Government officials countenancing and encouraging the practice of bootlegging on American ships, for the profit there was in it, and now we have another agency of the Government acquiescing in, or encouraging, defiance of interpreted law, on the ground that not otherwise can the competition of State banks be successfully met. Oh times, oh morals!

We ought to say that back of this new program of branch banking lurks a sinister outcome, quite aside from the objections hitherto urged in years past against the system. The truth is that the arrogant and merciless administration of the Federal Reserve System, "the head of many branches". has so terrorized or disgusted honorable bankers in all parts of the Union that they have declined to have anything to do with it. They will not join. Even as the country was in the throes of the worst commodity panic ever known, the Federal Reserve Board, which was the cause of it, was using every influence it could bring to bear to induce small State institutions to join the system. So, it said, could the banking resources of the smaller communities be strengthened. The truth was that the independent state banking strength, which Governor Harding could not firmly control, had stood in the days of panic as the almost sole protection and defense of the harassed agriculturalists of the nation, and others, and the protagonists of complete centralization of financial authority began then to seek ways and means to break up that independent system and tie it to the reserve system. They could not wheedle and cajole the State institutions, so, it would appear, a new plan was adopted-a plan of subtle warfare, different in form from that denounced by the United States Supreme Court, but not different in purpose.

If the State banks would not join the Federal Reserve System, then let them be driven out of business altogether by being attacked in every locality. Let the mighty national institutions establish branch banking, and sooner or later break the local State banks.

It is an accepted tenet of bankers that no other result can follow branch banking. Here is what Edward V. Vreeland, Vice Chairman of the National Monetary Commission, said in 1909, and his views were concurred in by Senator Aldrich: "The branch-bank system will drive any other system with which it competes out of existence."

There is more than one road to Rome. Governor Harding and his associates were unable to destroy the independent banking system of the United States when they massed against it every implement of attack they possessed during the recent panic. The Federal Reserve System came out of the struggle, not with its competitors in its stomach, but with the local institutions still unconsumed, still alive, still giving service. But now, if they can put national banks into the branch-bank business, and so inevitably destroy local banking, they will by this secondary maneuver reach their goal.

We are amazed that Comptroller of the Currency Crissinger has permitted himself to be fooled on this issue. By a paradox, this honorably-minded Ohio banker, to whom the people of the United States owe a mighty debt of gratitude, since it is to him more than to any other man that credit must be given for the reversal of policy as to credit restrictions which the Federal Reserve Board adopted, should somehow have become the pawn in the subtle scheming of the crowd he has always militantly opposed. It is only by the acquiescence of Comptroller Crissinger that branch-banking by national banks has even hope of existence in this country. He is the nation's guardian and it is he who lets down the bars.

Comptroller Crissinger declares that he is sort of passively permitting the establishment of branch national banks only in those States which permit State institutions to engage in branch banking, and that he does so only because not otherwise can such national banks meet "ruinous competition." He calls it "ruinous", which in itself constitutes an admission that no other banking system can stand against branch competition. That is why it is "ruinous", because it becomes a monopoly. And it is fair to ask Comptroller Crissinger how he can reconcile this view of the inability of national banks to compete with the fact that the national banks enjoy exclusive privileges, under federal law, which are denied to State institutions. The cry of "ruinous competition" would with more propriety come from the State institutions.

We have not touched particularly on the savagery of concentrated banking. Senator Aldrich, when branch-banking was urged, properly condemned it, and the Federal Reserve System, as a matter of fact, was assumed to have ended any possible argument in favor of branch-banking. Senator Aldrich said, in 1909: "Whatever may be the advantages of a system of branch-banking in other countries, I do not think it possible to adapt it to conditions existing in the United States. The twenty-five thousand banks now in existence are largely independent institutions, whose managers are familiar with the wants and requirements of the communities in which they are created. The great mass of the people who use banking facilities, either as depositors or borrowers, would be unwilling to give up the advantages of that intimate personal knowledge of the local bank officers and managers which they believe to be essential to their interests." That was the truth then and it is the truth now.

We could wish that Comptroller Crissinger would reverse himself and even now put a stop to the dangerous situation which he has apparently been begulled into accepting. But whether he does or not, that never again may this danger arise there should be promptly enacted by Congress a specific law prohibiting the establishment of branch national banks under any guise. This should be done immediately the House reassembles. Every day of delay is dangerous, for strong national banks, excited by the possibilities of extending their domains, will be flooding the country with branches and thereafter seeking to perpetuate them on the ground that no expost facto statute can apply.

The people of the United States simply will not endure complete centralization of financial control.

Self mastery is the essence of heroism.—Emerson.

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COUNTRY CANNOT AFFORD TO HAVE STRIKES SETTLED AT "ANY PRICE."

BECAUSE independent and loyal workmen in mines and railroad shops have been willing to take and hold jobs when other men quit these jobs, the wheels of American industry have been kept moving. Today the independent operators and miners are practically the sole source of the nation's coal supply, and the railroad shops are being operated by loyal employees and new independent workers.

The public cannot and will not afford to have these strikes settled at "any price," and any settlement that does not definitely preserve the right of individuals to work will be inconclusive and mischievous. In the present strike disputes there is at stake an outstanding American principle which is of far greater importance to our country than the wages of any group of workmen, the hours that they shall work and the conditions under which they shall work.

This principle was clearly emphasized by President Harding in the public address in his home town on July 4, when he said:—

"A free American has the right to labor without any other's leave. It would be no less an abridgement to deny men to bargain collectively. Governments cannot tolerate any class or grouped domination through force. It will be a sorry day when group domination is reflected in our laws. Government, and the laws which government is charged with enforcing, must be for all the people, ever aiming at the common good."

"The foremost thought in the Constitution is the right to freedom and the pursuit of happiness. Men must be free to live and achieve. Liberty is gone in America when any man is denied by anybody the right to work and live by that work. It does not matter who denies."

Yet what the President asked the railroad executives to do in his effort to adjust the shopcrafts strike amounts to a surrender of just this principle. The proposal that all of the strikers be reemployed and given the same place and seniority they possessed before the strike is impossible of acceptance. When these men deserted their positions and went on a strike in violation of a ruling of the Railroad Labor Board and left their employers they relinquished the privileges which had accrued through the period of their services and the employers had but one alternative if the railroads were to be kept running and that was to fill their places. The strikers voluntarily surrendered their seniority, showed their contempt for it, left it and lost it. Those who remained continue to hold the seniority position gained by period of service. Many have been advanced to positions of importance according to ability and other men have taken the places of the strikers, not as strike breakers but as permanent employees.

Many men have entered the railroads' employ with the definite assurance that their effort would mean regular and permanent employment. To give all strikers their former positions would mean that many of these new men who have taken their places would be reduced to a lower grade or take their places again in the ranks of the unemployed, while those faithful employees who have remained and thereby advanced would be placed in their former positions according to their seniority rank. Thus those who remained faithful in a national crisis would in no wise be rewarded for their signal service, but would be sacrificed to those who defied the decisions of the Government as expressed through the Railroad Labor Board. The railroads can not in fairness to themselves or the people be disloyal to men who have been loyal to them. They can not rightly prefer men who have been disloyal to them.

"Seniority in each class of railroad employees" according to Robert S. Binkerd, assistant to the chairman of the Association of Railway Executives, "means that those who have served longest in the continuous employ of the railroad stand at the head of the list in the order of their length of services. Standing at the head of the list means that they have first call upon promotions, desirable transfers and continuous employment."

"For the classes of men now on strike the senjority rules were promulgated by the United States Railroad Labor Board on November 29, 1921, in addendum No. 6 to decision No. 222," and among its chief provisions summarized here are;—employees working on night shifts and desiring day work shall have preference when vacancies occur; when new jobs are created the oldest employees in point of service shall be given preference; when it becomes necessary to reduce expenses the working hours may be reduced to 40 a week before reducing forces and the seniority rule will apply likewise to reduction and restoration of forces; when forces are reduced if men are needed at any other places they will be given preference to transfer to the nearest point.

Thus with all these privileges accorded strikers, should they be readmitted to work under the President's proposals, they would displace loyal men wherever the seniority was greater than that of the men who remained faithful to their obligations and every striker would take precedence over men employed since the strike began; the new men would be the first laid off in any reduction of forces and therefore the promises of regular and continuous employment by the managements would be violated, and thus the men of low seniority and new workers would be made the casual or occasional employees of the railroad industry, while those who had disregarded their obligation to the public and the railroads would hold the big majority of positions insuring permanent and regular employment.

"Liberty is gone in America when any man is denied by anybody the right to work and live by that work," said the President of the United States in his address at Marion, July 4. And yet the proposals of the President, unanimously rejected by the railroad executives, embody a surrender of this very principle. A settlement of the strike which penalizes and sacrifices the faithful employee and the independent workers who hold the strikers' former positions will be un-American, and can not be tolerated by the American public.

To accept such a proposal would be to restore conditions existing prior to July 1, and nothing would have been accomplished. A rehearing of the decision which caused the strike would be the inevitable result. But if the original decision was right then it is right now and will remain right, unless force is to overpower Government and its mandates are permitted to be cast aside by a conspicuously small minority, to the detriment of the remaining citizenship of the country.

Folks inside the penitentiaries have to respect law and order; those outside would benefit by doing likewise.

Missouri is not different from other States. Try to tell an American citizen how he must vote and he'll assert his independence.

The boll weevil would laugh if he could read the guesses of what the cotton crop is going to be. He breeds and eats faster than statisticians can figure. Less cotton and more quality is an answer that protection on long staple cotton seeks to give.

It may be said that if American victims of German aggression and murder had been treated with half the consideration the Secretary of State shows the German claimants of property held by the Alien Property Custodian they might some of them, even now, have a fighting chance to recover.

ITS ECONOMIC ASPECTS ALONE COMPEL THE DISCUSSION OF PROHIBITION IN BUSINESS PAPERS.

University of the Philippines, Office of the President.

Manila, April 17, 1922.

Editor Manufacturers Record:

The answers to the enclosed questionnaire comprehend my attitude toward prohibition. I am more fully persuaded than ever that the enactment of the 18th Amendment was the greatest forward step any nation has ever taken in the civilization process.

GUY POTTER BENTON,

In further emphasizing his views as to the value of the Eighteenth Amendment, President Benton says that he is more earnestly opposed to the liquor traffic than he was five years ago when he signed the petition to Congress and he adds, "My views and convictions concerning Prohibition are accentuated and accelerated in its favor with the coming of every new day." Such is the testimony of millions of American people.

The question was recently asked why the MANUFACTUBERS RECORD discusses the Prohibition question. The answer is very simple. The MANUFACTUBERS RECORD, seeking to advance the best interests and the broadest prosperity of this country, has always opposed the liquor traffic on moral grounds. It has likewise been opposed to the liquor traffic when viewed from the purely economic standpoint.

Prohibition has meant increased efficiency of men, fewer accidents in factories and on railroads, more and better food and clothing for women and children; larger material and moral advancement for millions who had been under the control of liquor drinking. Wherever the saloon existed it was a hotbed of crime and immorality, of political rottenness, a cancerous growth which was sucking the life blood out of the best interests of the nation.

When the railroads and great industrial corporations found that accidents were lessened, that more passengers and fellow employees were saved under Prohibition than under whiskey drinking, the country readily accepted their decision that their employees should not drink while on duty—and many of them took the ground that they should not drink at any time.

Prohibition is therefore a subject for discussion in a business paper just as much as is the question of better methods of transportation, of highways and railroad building, of improvements in factory operation. None of these questions bear more directly on national progress than the Prohibition question. On these grounds alone the Manufacturance Record would be recreant to its responsibility if it did not discuss the Prohibition question and set forth strongly its own views and the views of the great leaders of industry and of education in this country.

AUTOMOBILES COULD HANDLE BULK OF PASSENGER TRAVEL.

THAT motor cars can handle passenger traffic adequately if the railroad strike becomes serious is the opinion expressed by Roy D. Chapin, vice president of the National Automobile Chamber of Commerce, New York. There are plenty of cars and busses in suburban areas to carry the business population to work, he maintains, and adds that "motor cars will care for the traveling public in any crisis. The chief problem will be not in providing enough motor cars and motor busses in our large cities, but to arrange for adequate parking spaces."

City workers, traveling between suburbs and cities, are the largest element in railroad travel, but every third family in a suburban area owns an automobile and those individuals who drive to work can take their neighbors with them. Be-

sides the private cars there are 20,000 busses in this country and also thousands of taxicabs.

Traveling salesmen are already using automobiles to a large extent in covering their territories throughout the country and more will do so should the strike become oppressive, which suggests the thought that much of this use of motor cars might become permanently established. With the use of automobiles, it is claimed, sales increase from 40 to 100 per cent daily, because a salesman can reach more places in a day.

As to summer vacations they can easily be covered by automobiles, either private or public, and in view of possible emergencies Mr. Chapin stresses the importance of having alternate routes on all highway systems so that if one road happens to be blocked for any cause a convenient detour can be made.

The great importance of Mr. Chapin's suggestions will be fully appreciated by everyone who has given any thought to the subject of transportation.

Recently transportation of passengers from cities to suburbs has grown rapidly through establishment of regular automobile bus lines. Besides, the automobile truck has been adopted to use as a gasoline-locomotive and passenger car on many short lines, and its use is spreading. High license charges for pneumatic and solid-tire equipped automobiles engaging in passenger service have hampered the extensive development of bus lines in many localities. Perfection of the big size pneumatic tires, making easy riding possible and the recent reductions in prices of automobiles, trucks and tires, will no doubt do much to stimulate future bus line development.

ROAD CONSTRUCTION AND BUILDING WORK SUFFER FOR LACK OF CARS.

George R. Collins, president of the Collins Granite Co., Danville, Va., writes to the MANUFACTURERS RECORD under date of August 3, thus:

"The lastest calamity to befall the country is the service order No. 23 of the Interstate Commerce Commission dated July 25th, 1922, which deprives the quarries and building material industries of cars and puts a stop to road and building construction.

"It should be modified at once to permit the use of all open top cars for movement in the direction of the mines.

"The railroads in this section of the country are suffering from lack of motive power rather than from lack of open top cars. This order has already resulted in a great lucrease in the number of idle cars of that description with a great loss of revenue to the railroads and the industries affected, and has thrown out of employment large numbers of men. It affords another good argument for the abolition of the Interstate Commerce Commission as now constituted."

There is no more important work under way in this country than that of improved highway construction, and everything should be done by those in control of the railroad situation to advance it, especially at present, for if the railroad shopmen's strike should involve other men in the employ of the railroad companies much of the traffic now moved by trains would be transferred to automobiles, trucks, and other motor vehicles for transportation over the highways. Immediate steps should be taken to remedy any condition like that to which Mr. Collins refers.

Besides, the erection of buildings now begun or projected is also of great importance to the welfare of many communities and the country generally; they are in large part public works, such as schools, churches, municipal buildings, etc., and their builders should be kept amply supplied with building materials.

A way should be found to do this without impairing the service for the general advantage of which the order was issued.

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Prosperity and Comfort of West Virginia Miners.

FACTS VS. FICTION IN A MUCH DISCUSSED STATE—MARKED IMPROVEMENT IN LIVING CONDITIONS SHOWN—WHERE UNION ORGANIZERS FAILED TO COERCE—NATIVE WEST VIR. GINIAN WILLS TO BE FREE.

[West Virginia and other Southern states, through coal mined by independent or non-union men, have saved the nation from complete domination, and the shutting down of factories for lack of fuel, and the inability of railroads to run. It has been Southern coal mined by non-union men that has saved the situation. Recognizing the great importance of this to the entire country the Manufacturers Record has sent a member of its staff, Mr. Albert Phenis, into West Virginia to tell the story in full. Several articles by Mr. Phenis have already appeared, in which were related the lawless attempts of the United Mine Workers to compel by force of arms the unionization of West Virginia mines.

The alleged privations and wretchedness of the miners have been exploited in an appeal to public sympathy for the union cause. The actual facts regarding conditions in the mining regions of southwest West Virginia, now and heretofore, are presented by Mr. Phenis in the article herewith.—Editor Manufacturers Record.

By ALBERT PHENIS.

What of the home surroundings of the coal miners of West Virginia, the living conditions of themselves and their families, their opportunities for a decent wage? To read the lurid tales that such an over-night investigator as Rabbi Wise and some of the crew of New York magazine and Sunday supplement writers have disseminated one might expect to find prevalent a condition of appalling wretchedness, of galling poverty and enslaved dependence on the hardened self-interest of the "greedy operators" in these fields.

As one who has known these hills and vales for many, many years; who has been among these people from the days before coal mining in the back country was begun, and is familiar with the changes and the conditions of today, I want to brand these statements as calumnies of the most infamous type, because known to be false by the power-besotted, salary-gorged leaders of the United Mine Workers of America and because of the ease with which the facts could be ascertained by any writer or investigator who comes into



Bird's-ey view of section of Cabin Creek District. Note the space between houses, the garden plots and the cultivated hillsides adjoining

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1—New Y. M. C. A. building, opened Christmas Day, 1918, teacherage and consolidated school adjoining; children's playground and tennis court in foreground. 2—The first Y. M. C. A. in the bituminous coal fields of America was opened in these buildings on Thanksglving Day, 1909, in what had been the most notorious saloon in Kanawha county. Then the sober man was the exception; even before Prohibition became the law drinking had gone out of fashion. 3—"America-first" parade, after commemorating the day by combined Sunday schools on the property.

the coal fields with either the desire or the willingness to learn the truth.

Now, what is the history of coal mining along the creek and river valleys south of the Kanawha, which is the region where the flercest warfare has been waged by the unions against the non-union operator and miner. and regarding conditions in which the rankest misrepresentations have been made and the grossest misapprehension entertained?

Approaching twenty years ago, I went into the mountain fastnesses of Kanawha, Raleigh, Boone and Logan counties, on horseback and by buckboard in turns. I stept in the feather beds of the natives, I partook of their frugal fare, and I experienced the unbelievable absence of all sanitary conveniences, conditions which universally prevailed then, and had existed from the time of the first settlements. My mission was to visit some of the outcropping coal seams, then unworked, of which I had heard glowing reports. Of great thickness, so that they could be easily and inexpensively worked by drift mining, they gave promise of the great richness which has since been proved through their development.

Deeply impressed by the isolation, the barrenness, of the people's lives I frequently asked them why they remained in a place where the country was practically all mountain sides or beds of streams, making it impossible with their steeply sloping hillside truck and corn patches, to raise more than enough for bare subsistence, when they could remove to lands elsewhere that have broad, level stretches of fertile soll, yielding a bountiful return for much less effort.

Invariably the answer was an expression of deep devotion to the mountain country. Instances were given of men who had left on account of "trouble," which meant then either moonshining or an affray—and who after remaining awhile in more or less distant lands had been so overcome by a longing for their mountain homes that return they did, in face of possible arrest and a prison sentence.

"It seems like Providence looks after us here, anyways," one more than ordinarily loquacious graybeard said to me. "First we got what money we had to have by selling skins to the storekeepers and traders. Then, when the wild animals was pretty well killed off, and we begun to wonder where we could get money now, the timber men come in and paid us for our poplar and walnut trees. When they was about gone, and we wondered what was coming next, the 'sang' men come along and paid us money to dig 'sang.' And, now, since the 'sang' is all dug they is talk of opening up the coal mines, and I reckon then we can sell our coal and get work in the



Prepared for a swim. All miners' children, and all experts.

mines and it will be a long, long time before we need to worry about where we will get what money we'll have to have."

Railroads were built up the creeks and rivers and the coal men did come in and open up the mines, bringing such wealth to the land owners as they had never seen before, and giving employment and a hitherto unknown supply of money to every man who wanted to work. There was contact with the outside world, there was opportunity to visit the cities, in many cases an untried adventure to the women and children and even to many of the men, and for the first time there



1—Calesthenic exercise, teacherage and consolidated school in background. 2—Sunday school has just closed. Every community possesses a fourishing Sunday school. 3—The last day of school. The consolidated school is completely changing the type of children. A better day is assured for the coal fields of tomorrow.

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1—View of Carbon; Sunday school building at extreme left; superintendent's residence in foreground at right. 2—The natives were accuss tomed to this type of building 15 or 20 years ago. The present miners' cabin is a mansion to them. This picture taken this spring 3—A row of residences.

began an acquaintance with the comforts, the conveniences and e^{φ} en the luxuries of civilization.

The other day I visited a string of mining towns along the Cabin Creek. I found the miners living in comfortable, attractive cottages, with garden plots and the free additional use of all the tillable hillside ground they were able to cultivate. I found a healthy, normal development of community life, of a pronounced American type. Here are public schools, with a splendid high school in the district. There are churches and Sunday schools, and a great Y. M. C. A. building, with a big auditorium and reading and recreation rooms. There is a swimming pool, with a huge tank, which is a magnet of attraction for young and old, with the result that there is hardly a miner's child, girl or boy, who is not an expert swimmer. In this pool also take place the baptizings by the churches. A playground for children and a tennis court face the Y. M. C. A. building. There are good roads and bridges, whereas the natural roads formerly ran largely along the creek beds and were impassable in high water. Most of the better type of miners own automobiles.

The string of towns along Cabin Creek-Cabin Creek, Carbon, Decota, etc.-were each established around a mining development, and owe their individuality and their names more to that fact than to any physical distinctness. Their social, educational and recreational activities have a common center, and geographically they are as one elongated town, with a "Main street" in common. The coal companies own the real estate and the houses, and usually their rental is \$4 a month. The companies gave the land for the Y. M. C. A., the playgrounds, the schools and the churches, and generally they paid for the buildings and the improvements. They also contributed largely to the road construction and the building of bridges. Through them as well, the community work was undertaken. It was put into the hands of Mr. J. A. Page, who first started about 1909, and who, after doing war work elsewhere and also engaging in Y. M. C. A. activities in Panama for a few years, returned to Cabin Creek and is the director today. A marvel of enthusiasm, tact, devotion and good will, he has done a notable work in fostering and cementing a community spirit and an earnest interest, in old and young alike, in educational and spiritual well-being and advancement.

There is a state organization of the Y. M. C. A., working in conjunction with the international body, and with greater or less achievement, the work undertaken at Cabin Creek is duplicated throughout all the mining districts. The Cabin Creek conditions may not be completely matched elsewhere, although there are numerous mining towns of even superior physical attractiveness, and everywhere the earnest desire of the operators to provide the best possible surroundings and influences is being manifested. Progress and improvement in every feature of the undertaking is the ambition of the faithful workers in the Y. M. C. A. oganization here in the field, and it is the purpose of Mr. Page, as an

illustration, to bring conditions throughout the entire Kanawha district up to the established Cabin Creek standard.

Summarizing the changes that have been brought about and outlining the possibilities for future progress, Mr. Page said:

"The Cabin Creek of to-day is not the Cabin Creek of 15 years ago. Then the men who could read were almost the exception; now the men who can't read are almost the exception. Then the schools and churches were shacks; now practically every community has a good school and church. Then the country was so new there were practically no roads;



Italian miner, with terraced garden, a treatment borrowed from his native land.

now good roads and automobiles abound. At the time of the Mingo-Logan march, Upper Cabin Creek was the last to go and the first to return. The men as a class would not have gone at all if they had not been commanded to go and threatened if they did not go. The miner's greatest handicap to-day is bad leadership. If better educational facilities can be made accessible to the communities—more high schools and vocational schools, better Sunday schools and a higher type of clergymen—another few years will see a still more marked change in the atmosphere of the mining communities.

"The conviction grows on me that a strong Chautauqua center, like Winona, or Chautauqua, would be very helpful in the Kanawha valley. The years I spent as president of the Cabin Creek Sunday School Association and then in the County Sunday School and Law and Order work I feel have been well spent as they have put me in close touch with the key people of the county. I am now advocating to them on every opportunity I get the making of the Kanawha valley a recognized educational center through a strong Chautauqua association. This would soon make the Kanawha valley the mecca for all sorts of educational, religious and social gatherings; it would bring to the Kanawha valley the leaders in all sorts of social and educational movements; it would bring

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the key people from our various mining and other communities together on a common footing for a common viewpoint, and in my judgment this in a very few years would be a marked leavener of the community and state."

While strike conditions obtain in the Cabin Creek fields, which were unionized by the "shot gun" policy of assassination and intimidation in 1912, but since April of this year have been operated independently of the union, there has been less violence, less bitterness, as between union miners and those who have gone back to work, than in some other sections, so Mr. Page reports. Unlike some fields, where union miners have been so indoctrinated with the socialism of the United Mine Workers and Karl Marxian hatred of law, order, religion and God Himself that neither they nor



Cabin Creek District High School at East Bank. Last year 226 pupils enrolled, 100 per cent increase over the year before. Cabin Creek District has 220 school teachers, 6600 pupils, 98 school houses, of which 10 are consolidated schools. Budget last year: Teachers, \$222,000; new buildings, \$69,000; repairs, \$38,000.

their children are seen at church for fear of losing caste with the union, Mr. Page reports that one of the leaders among the strikers in his community is the teacher of a class in Sunday school.

Not all the mines in this field have started up, one of the larger ones reporting that in 12 months there have been but 39 cars of coal mined. "No market" conditions brought the shut-down of many mines in the Kanawha field, as elsewhere, for a large part of last year. In spite of appeals to customers to lay in stocks of coal while the demand was slack, many managers of industry figured that coal would be cheaper after April 1 and to the detriment of themselves and the operators, allowed a large number of the mines to be shut down. This idleness has been a great burden for the operators to carry, as their overhead, royalty and organization expenses are fixed charges. This condition has also been burdensome on the miners, although with their garden patches, and their rent free in cases of necessity, there has been no actual suffering in this section. During the war the miners freely purchased of the various Liberty bond issues, so I was told, and that there is little or no actual want today the appearance of the people and their well-kept, flower bedecked homes would seem to indicate. To relieve the present burdens as far as possible, the miners who are out on strike are allowed to stay in the houses they occupy, the custom throughout the whole southern district being to notify them to vacate only in case they finally refuse to go back to work and their houses are needed for others who will work.

Approximately the so-called 1917 scale is in effect in such West Virginia mines as are in operation. This gives day laborers in the mines about \$5 a day for work that brought around \$2 in 1914. Piece-workers make all sorts of money—from \$10 to \$18 a day, so I have been repeatedly told. And a peculiar fact in the industry is that these big money-makers

rarely work over three or four days a week, and sometimes not full days at that, although under present conditions of shortage of men in all the newly-made open-shop mines they could work six full days, if so disposed.

These are conditions where native Americans work. There has been work for all who wanted to work, and whatever slackening may have occurred on account of car shortage, there will be work again when the cars may be freely moved. Tales of suffering and distress and of the grinding down of the miners do not under these circumstances carry far with those who know the truth. As for conditions among the Hungarian and other foreigners found in some of the fields, ask any doughboy who saw these gentry in their lair how any conceivable American conditions compare with those they found surrounding the working men of any country in Europe they visited.

The Aaron Burrs among the union organizers have seduced an occasional Blennerhassett among the native West Virginia miners; but as a rule the native West Virginian cherishes his freedom and doesn't want to be bothered with union restrictions and exactions. The obstinacy of the non-union miners in the Mingo county fields was the occasion for the importation of thuggery, machine guns and all the other coercive means that millions of check-off money and the ingenuity of the United Mine Workers officials could devise. and for the treasonable action of United Mine Workers in starting out from Marmet on three different occasions to make civil war on those who refused to be annexed to their dominion. It is probable that no similar attempt will ever again be made. On the last occasion they got about the same kind of reception as that accorded to Jesse James and the Youngers when they attempted to rob the Northfield bank in Minnesota. Non-union miners, business and professional men, the whole able-bodied citizenry of the nonunion territory, turned out as a massed posse comitatus when the siren blew announcing the coming of the outlaw army. Only as another "gracious act" were the invaders given opportunity to get away alive and march back home.

Left to himself, given the conditions which he prefers, the West Virginia miner will produce an enormous quantity of coal—2,000,000 to 3,000,000 tons a week, it is firmly believed—and he will be contented, happy and prosperous at his work. He will be hospitable, even amiable, if not "put upon." But it is well to remember "Montani Semper Liberi," for that is a definition of his character as well as the motto of the state.

Hard to Believe President's Position Properly Reported.

S. H. Moore, Manager Tampa-West Coast Realty Company. In the face of the unspeakable Herrin outrage, and of the

murders and rioting the former railway employes are indulging in throughout the country, is it possible that the news dispatches are correct in saying the President of the United States wants the railroad executives to "settle the shopmen's strike by allowing these former employes to resume their seniority rights?"

A fine standard of business honor it would be to hire men, assuring them they would have steady employment, and full seniority rights, these new men working in such danger that armed guards have to protect them, and then inadequately, at times, and then the President of the United States says, "Throw those new men out and take back this bunch of trouble-makers, strikers, anarchists, and give them back all of their seniority and other rights and privileges?"

If we understand the news dispatches right, could such a disgraceful proposition be prompted by anything in the world but a bid for the Union Labor vote?

I sincerely hope it is a mistake, someway—that we don't understand the news dispatches properly.

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New Building Operations in South for First Six Months Approximately \$188,000,000, or 36.7 per cent Increase Over 1921.

Building permits issued in 61 representative cities and towns in the Southern states during the first six months of 1922 had a valuation exceeding by more than 36 per cent the total for the same cities during the corresponding period of 1921, according to a compilation of returns from the various building inspector's departments just completed by the Manufacturers Record. And despite the unfavorable conditions resulting from the coal and railroad strikes the valuation of June permits exceeds that of the same cities in May. It must be added that this is the sixth consecutive month that Southern construction progress has continued its upward climb, clearly showing the widespread activity now under way and the vast amount of new building to be undertaken during the next few months.

Reports from 61 cities give a total approximate value of

permits issued during the first six months of 1922 of \$187,-962,759 which represents a gain of about 36.7 per cent over the same period last year. The valuation for the first six months of 1921 in the same cities was \$137,425,940.

In June, 1922, the total valuation of permits issued in 68 cities and towns was \$41,440,369, compared with a total of \$26,618,080 for the same cities in June, 1921. Thus, June figures for 1922 represent a gain of 53.6 per cent over the same month last year.

There are 13 Southern cities with June permits exceeding \$1,000,000. They include:—Washington, \$5,910,785; Atlanta, \$1,374,516; Louisville, \$1,577,950; New Orleans, \$1,104,830; Baltimore, \$2,206,920; Kansas City, \$2,758,200; St. Louis, \$2,436,755; Greensboro, \$2,339,995; Tulsa, \$1,050,250; Memphis, \$1,304,640; Dallas, \$1,533,046; Houston, \$1,339,822; and Richmond, \$1,803,631.

State and City.		Statement lay, 1922.		Operations ne, 1922.		first Six ne, 1921.		1921 and 1922. ix Mos. 1921.		x Mos. 1922.
Alabama: Birmingham Montgomery	509 69	\$571,157 62,350	432 48	\$592,737 34,070	451 90	\$395,795 73,302	2785 565	\$3,085,416 279,268	2492	\$3,765,655
Arkansas: Little Rock Fort Smith Pine Bluff	243 72	$344,596 \\ 94,850$	183 70	231,539 $109,000$ $116,291$	226 30 30	228,845 49,225 66,290	1097 279 163	$\substack{1,278,248\\409,748\\309,175}$	1202 402	2,230,906 921,515 426,000
District of Columbia: Washington	1107	5.036,285	1055	5,910,785	731	1,928,135	3872	9,811,033	5081	21,679,658
Florida: Jacksonville	321	605,596	324	626,613	296 245	467,117 873,600	1634 1341	2,567.224 $2,739.800$	$\frac{1845}{1066}$	2,804,123 1,902,544
Orlando	184 81 69	$385,600 \\ 109,070 \\ 70,346 \\ 322,272$	182 72 56	616,844 87,323 30,117	95 52 275	164,300 58,199 449,108	582 472 976	682,095 690,205 2,034,113	423 382 1479	1,379,612 217,748 1,516,542
Tampa West Palm Beach Palm Beach St. Petersburg	281 62 7	803,410 207,000	226 115 4	$206,720 \\ 257,705 \\ 38,300$	43	$221.075 \\ 129,700$		631,890 466,450	445	1.441,470
Lakeland	$\frac{141}{20}$	377,350 41,300	130 20	$654.510 \\ 64,950$	157	547,225	194	2,376,120 495,000	815 202	2,113,490 536,800
Georgia: Atlanta Augusta	$608 \\ 272 \\ 20$	1,743,054 131,655 92,250	415 159 13	$\substack{1.374,516\\145,765\\32,000}$	335 178	855,716 144,331 19,905	1060	5,452,022 314,010	2546 969 133	8,618,673 812,369 324,765
Augusta Columbus Macon Savannah Brunswick	158 76 16	$\begin{array}{c} 127,437 \\ 238,400 \\ 7,930 \end{array}$	176 53 25	125,025 154,375 9,035	70 71 19	90,830 221,975 3,538	345 352 134	379,351 769,090 32,437	872 346 142	576,974 1,037,400 70,123
Kentucky: Louisville Lexington Covington	528 104 97	3,339,200 225,342 183,125	409 87 85	1,577,950 501,836 550,350	382 56 79	1,007.650 $114,071$ $184,825$	1792 403 355	3,662,500 612,394 592,100	2215 477 413	9,323,770 1,596,887 1,140,550
Paducah	40	39,690	30	37,320			***	*****		
New Orleans Shreveport Lake Charles	$\frac{311}{310}$	$\substack{1.102.375 \\ 684.299 \\ 60.036}$	$\begin{array}{c} \dot{2}\dot{3}\dot{7} \\ 29\end{array}$	$\begin{array}{r} 1.104,830 \\ 355,160 \\ 33,203 \end{array}$	244 26	546,950 355,160 21,995	1361 103	$3.536.474 \\ 1.841,945 \\ 112,200$	1463 189	4.738.660 2,707.859 177,164
Maryland: Baltimore Cumberland	2645 66	4,237,560 152,830	$\frac{2055}{49}$	2,206,920 148,656	67	3,328,680 156,385	259	25,382,763 562,145	$10.357 \\ 265$	19,390,780 529,730
Mississippi: Meridian Jackson	120	189,550	69	49,500	10 32	65,885 69,850	143	244,770	485	508,050
Missouri: Kansas City Springfield St. Joseph St. Louis	824 84 97 1524	2.339,600 146,660 86,900 2,396,880	534 69 98 1234	2,758,200 $218,440$ $117,505$ $2,436,755$	394 59 1083	$\substack{1,129.425\\92,200\\108,475\\2,150,069}$	2162 393 5368	$\substack{6,204,625\\467,642\\427,465\\6,426,734}$	2397 386 503 6381	10.385,063 665,655 628,639 11,152,826
North Carolina:	102		95	258,562		121,105	0000	949,067	508	1,791,153
Asheville Durham High Point Charlotte	47 49 49	249,415 163,900 67,838 149,395	37 36 53	105.425 305.500 482,676	18 21 29 40	83,500 29,680 85,250 99,293	108 110 239	398,532 228,933 794,657	182 192 291	562,065 1.001.544 2.062,151
Raleigh Wilmington Winston-Salem Greensboro	73 131 65	71,700 162,386 250,555	17 145 62	77,500 274,752 2,339,995	16 121	99,293 90,500 174,382 319,993	95 686	338,850 1.448.078 1,040,543	608	993,869 3,158,031
Oklahoma: Oklahoma City Tulsa Muskogee Okmulgee Shawnee	224 191 20 17	1,141,563 1,065,925 77,638 83,650	236 204 41 26	476.561 1,050,250 86,866 103,100 41,982	184 116 40 29	444,293 286,125 118,430 158,625 69,117	1263 1098 181 282	3,588,982 4,105,500 563,460 1,209,175 167,626	1170 998 213 114	4,423,802 4,571,070 1,414,654 440,000
Ardmore	68	101,000		******	308	598,905		*****		*****
South Carolina: Charleston Columbia Greenville Spartanburg	50 109 52	141,295 122,003 136,220 70,057	55 110 42 61	233,076 118,660 171,223 81,055	52 125 44 45	162,825 88,974 132,315 34,185	349 644 332	764,874 869,403 641,690 455,625	289 581 288	781,452 788,115 702,003 289,503
Tennessee: Knoxville Chattanooga Memphis Nashville	210 190 427 442	426,414 788,446 1,081,974 605,586	258 203 439 316	888,890 213,961 1,304,640 305,416	200 311 295	143,437 131,581 1,061,664 253,759	643 1189 1462 1455	1,337,102 1,517,731 3,578,261 1,033,710	1128 1134 1852 2062	2,494,022 1,501,315 7,181,144 2,459,235
Texas: Houston Galveston El Paso Dallas	752 384 131 474	1,107,431 160,728 321,508 1,388,355	647 387 358	1,339,822 378,956 334,640 1,533,046	577. 480 134 436	910,156 393,345 334,640 1,247,932	3316 2530 828 2367	4.582.890 909,643 2,174,183 7,544,305	3762 2129 607 2378	7,484,323 1,473,761 1,622,452 9,749,386

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State and City.	May,	1922.	Jun	e, 1922.	Jun	ne, 1921.	First S	ix Mos. 1921.	First Si	t Mos. 1922.
Fort Worth	237	435,002	255	636,812	 237	379.329	1059	2,330,504	1277	3,331,096
Beaumont	36	131,690			37	109,787	174	660,463		
Austin			44	110,195	39 39 39	46,010	173	204,956		
Waco	59	414,536		73,564	39	111,800		559,854		908,049
Amarillo	39	166,300	43	166,800	39	113,300	225	661,770	198	921,245
Port Arthur					124	74.066	826	648,304		
San Antonio	355	503,873	337	430,995	300	476,355	1721	3,333,705	2121	3,596,622
Virginia:										-,,-
Richmond	257	952,579	263	1,803,631	244	890,489	1146	5,070,919	1333	8,627,579
Norfolk	160	833,365	159	602,408	108	449,133	531	2,099,418	652	2,679,980
Lynchburg	45	45,918			23	42,750	128	421,000		
Roanoke	178	408,041	172	504,280	150	379,325	631	1.117,805	828	1,965,489
West Virginia:										
Charleston	99	309,601	118	409,918	132	369,400	703	1.712.359	556	1,520,671
Huntington	135	437,151	129	262,594	139	198,455	956	2.124,550	723	1,587,020
Wheeling			132	351,505	98	94,725	892	949,703		
Bluefield					17	66,625	126	432,325		

Over \$185,000,000 in Improvement Bonds Sold in the South for First Six Months of 1922.

The par value of 860 issues of bonds sold in the sixteen Southern states during the first six months of 1922 as reported weekly in the financial news columns of the MANUFACTURERS RECORD amounted to \$184,261,500.

During June, 135 issues with a total par value of \$38,948,500 were sold. Roads, paving and bridge bonds continue to hold first place in the value of securities marketed, the total for June being \$19,302,000, representing 32 issues, and of this amount \$9,185,000 was for road bonds to carry forward this class of work in North Carolina. Bonds for developments of various kinds and for miscellaneous purposes amounted to \$14,448,000 for 56 issues. School bond issues numbered 43 with a par value of \$4,398,500, and sewers, drainage and water works bonds totaled \$800,000, for four issues.

Similarly in the total for the first half year, road, paving and bridge bonds are first in value aggregating \$71,166,150, for 277 issues. Of this amount \$24,090,500 is for North Carolina road bonds sold totaling 49 issues, and \$20,961,750 is the par value of 64 issues for similar work in Texas. Miscellaneous bond issues stand second numbering 193 with an aggregate value of \$58,467,250, and of this amount \$18,121,-500 is the value of such bonds sold in Missouri including the \$15,000,000 soldier bonus bonds. The value of 246 school bond issues sold is \$34,050,100. North Carolina stands first in this classification with a total of \$9,558,000 for 46 issues sold. Sewers, drainage and water works bonds were marketed in the first six months, with a value aggregating \$20,-578,000, representing 144 issues. Texas school bond issues sold numbered 33 with a value of \$4,026,000.

SUMMARY OF BOND ISSUES BY CLASSIFICATION AND BY STATES. (FIRST SIX MONTHS OF 1922.)

	7		D VALI	JE OF BONI	DS ISSI	UED.				
Alahama		Roads.		Schools.		Sewers.	10	Misc.	0.0	Total.
Alabama	10	\$1,830,000	. 6	\$1,065,000	1	\$60,000	10	\$2,128,000	26	\$5,083,000
Arkansas	12	1,890,000	8	318,000	3	255,000	12	2,087,500	35	4,550,500
Florida	. 26	5,146,000	13	1,347,000	14	1,487,500	20	4,587,000	73	12,567,500
Georgia	- 8	1,761,000	11	4,863,500	5	1,003,000	2	103,000	26	7,730,500
Kentucky	4	1,082,000	8	1,331,500	6	934,000	4	3,152,500	22	6,500,000
Louisiana	27	3.621.500	15	1.838.000	- 5	189,500	10	8.764.500	57	14.413,500
Maryland	9	2,158,000	5	518,000	6	1.285,000	5	917,000	25	4.878.00
Mississippi	11	1,775,000	12	484,000	3	127,000	9	1,611,000	35	3,997,000
Missouri	8	1.521.000	13	2,340,600	14	2,100,000	12	18,121,500	47	24,083,10
North Carolina	49	24,090,500	46	9,558,000	23	2,694,000	32	4.416.000	150	40,758,50
Oklahoma	9	1.033,400	12	1.807.000	15	2,255,000	18	1.009.000	54	6,104,40
	19				9		10		43	6,388.00
South Carolina		1,957,000	13	1,351,000		2,947,000		133,000		
ennessee	16	1,234,000	13	1,320,000	- 5	915,000	10	2,087,000	44	5,556,00
exas	64	20.961,750	58	4,833,500	33	4,026,000	32	2,530,250	187	32,351,500
Virginia	5	1,065,000	7	637,000	2	300,000	13	4,790,000	27	6,792,000
W. Virginia	1	40,000	6	438,000			2	2,000,000	9	2,508,000
Totals	277	\$71,166,150	246	\$34,050,100	144	\$20,578,000	193	\$58,467,250	860	\$184,261,500
			an	INE.						
						-1				
:		Roads.		Schools.		Sewers.	-	Misc.		Total.
Mabama	1	\$1,000,000	1	\$200,000		*****	2	\$138,500	4	\$1,338.500
Arkansas	2	135,000	. 1	45,000			5	302,500	8	482,500
Florida	2	800,000	2	63,000			- 5	1.450,000	9	2,313,000
Kentucky	2	550,000	2	74.500	1	50,000	1	3,000,000	6	3,674,500
Louisiana	1	236,000	4	223,000			3	307,000	8	766,000
Maryland	6	1.868,000	9	103,000	1	150,000	9	217.000	12	2,338,000
Mississippi	9	90,000	9	45,000		,	2	260,000	7	395.00
	- 1	300,000	=	1.704,000	***	* * * * * *	5	802,000	13	2,806,000
	1					400 000	6		14	12,077,900
North Carolina	3	9,185,000	4	515,000	1	100,000	9	2,277,000		
Oklahoma	0 0 0		3	139,000	0.00	0.0000	2	46,000	5	185,00
South Carolina	1	75,000	3	300,000			1	70,000	- 5	445,00
Tennessee			3	310,000	- 1	500,000	4	560,000	8	1.370,00
Cexas	11	5,063,000	8	677,000			10	768,000	29	6,508,000
Virginia							6	2.250,000	6	2,250,000
West Virginia		*****	***		***		1	2,000,000	1	2,000,000
June	99	\$19,302,000	43	\$4,398,500	4	\$800,000	56	\$14,448,000	135	\$38,948,500
May	40		35	4.274.000			23	6.057,000	124	29,176,40
	46	15,314,400			20	3,531,000				
	41	8,379,000	21	2,398,000	22	4,846,500	24	2,258,000	108	17,881,50
March	69	11,790,500	53	6,126,600	42	4,574,000	38	22,620,500	202	45,111,60
February	32	4,392,000	41	6,376,500	27	2,587,000	28	3,087,750	128	16,443,25
January	57	11,988,250	53	10,476,500	29	4,239,500	24	9,996,000	163	36,700,250
Tetals	277	\$71,166,150	246	\$34,050,100	144	820.578.000	198	858,467,250	800	\$184,261,500

Nine Story Hotel for San Antonio.

San Antonio, Texas, Aug. 5—[Special.]—Herbert S. Green of this city is the architect for a nine story, 175 room fire-proof hotel to be erected by the Travis Investment Company. Bids will probably be opened about Sept. 1, by Russell C. Hill, of Rogers-Hill & Company, of this city.

\$750,000 Bank and Office Building at Baton Rouge.

Baton Rouge, La., Aug. 5—[Special.]—Preliminary sketches have been prepared by Sanquist & Staats, architects, for a bank and office building of reinforced concrete to be erected at an approximate cost of \$750,000 for the Louisiana National Bank.

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Loch Raven Dam, First Unit in Baltimore's Authorized \$25,000,000 Water Works Improvement.

[When Baltimore, Md., was authorized by the State Legislature several years ago to increase its city limits from 31½ square miles to 93 square miles, enabling acts were also passed to permit of the extension of public works. Among these was one providing for the issuance of \$25,000,000 in bonds for waterworks improvements. Of this amount \$15,000,000 have been issued, and under this \$4,000,000 are being spent for increasing the height of Loch Raven dam to impound 23,000,000,000 gallons of water and to purchase the necessary land that would be inundated by the lake to be created and the construction of additional facilities and equipment for transporting the water to the city. For purchasing all the existing private waterworks plants in the new city area, \$4,500,000 were made available and \$6,000,000 are being used for extending the big feed water mains to all parts of the new territory.

This big undertaking was designed to take care of the water-consuming requirements of Baltimore for the

This big undertaking was designed to take care of the water-consuming requirements of Baltimore for the next ten years. A splendid example of municipal management was evidenced by the thorough way in which agreements were made to purchase the land that would be overflowed. This land amounted approximately to a total of 2500 acres, divided among 97 owners. It took nearly a year to appraise and purchase the property. All of it was bought at private sale excepting four pieces, and of these, three were obtained by arbitration, and it was only necessary to institute condemnation proceedings on one piece of property. The purchase price was approximately \$400,000 for the 2500 acres, whereas an estimate had been given of \$500,000 to buy in 1500 acres.

In addition, an agreement was made with the Pennsylvania Railroad Co. for relocating its line, whereby \$300,000 were allowed the company, which agreed to assume all costs for relocating its tracks, which would amount to an additional \$600,000.

In addition to the properties mentioned, it was necessary to purchase the complete cotton mills properties at Phoenix and Warren with all the dwelling houses and other structures. These were bought for \$1,000.000.

The work of securing these properties was in charge of City Solicitor Roland R. Marchant, and the achievement as outlined above is perhaps without precedent in the history of American municipalities. The following article by Mr. Megraw, the water engineer of Baltimore, interestingly describes some of the construction features in connection with building the dam.—Editor Manufacturers Record.]

By WILLIAM A. MEGRAW, Water Engineer, Baltimore, Md.

Baltimore is engaged in making what is known as the Gunpowder improvement to its water supply. The plans include a dam at Loch Raven on the Gunpowder river to Impound 23 billion gallons of water, and a balancing reservoir to limit the pressure on a seven mile tunnel conducting water to the city, together with the necessary relocation of roads and bridges, the purchase and removal of the villages of Warren and Phoenix, the relocation of 1.5 miles of Pennsylvania Railroad tracks near Phoenix, the purchase of about 4000 acres of land from 54 different owners and elearing the ground to be flooded of buildings, trees and vegetable matter.

The principal feature is the Loch Raven Dam, which is about completed. Plans were first prepared in 1913 and the work completed during the following year to elevation 188 feet above mean tide, the base being made broad enough to support the additional section necessary for raising the dam later to elevation 270. The plans, under which the

present contract is proceeding, provides to raise the dam from elevation 188 to elevation 240. The dam is a solid concrete structure, 640 feet long over all. The spillway is 288 feet long and rises about 103 feet above bed rock.

In designing the cross section, upward pressure was assumed on all horizontal joints, equal to the full hydrostatic pressure at the upstream face, decreasing to zero at the downstream face. Porous drains in the horizontal joints, which will be described later, are provided to relieve upward pressure. Two 48 inch pipes passing through the old foundations control the ordinary flow of the river and enabled all concrete to be deposited on dry surfaces. One inch bent steel rods, five feet apart horizontally and vertically, imbedded three inches back of the downstream face, can be straightened to assist in binding the new concrete to the old, in case the dam is ever raised to a higher elevation.

The gate chamber is divided into two separate compartments and each is designed to supply the city separately.



IMMENSE LOCH RAVEN DAM ON THE GUNPOWDER RIVER, IMPOUNDING 23 BILLION GALLONS OF WATER FOR SUPPLYING BALTIMORE CITY. SOLID CONCRETE STRUCTURE 640 FEET OVER ALL, WITH A SPILLWAY 288 FEET LONG, AND RISING 103 FEET ABOVE BED ROCK, BEING 240 FEET ABOVE MEAN TIDE.

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Fifteen (15) sluice gates, 3½ feet by 6 feet, arranged at different heights, control the entrance of water.

The dam is located between steep hillsides and the available working space is small. Stone was furnished from a city quarry located on the west side of the river 3000 feet downstream from a point on the hillside opposite and above the dam down to and past the quarry to Loch Raven on the Maryland and Pennsylvania Railroad, about 2200 feet farther down. Loch Raven Station is about eleven miles from Baltimore. The railroad at Loch Raven Station is approximately at right angles to the river and follows along a steep hillside about 50 feet above the highway, which turns and parallels the railroad in both directions. A siding about 1600 feet west of the railroad station provides a means of handling materials from the railroad by gravity to the highway below. An old city-owned siding 1.6 miles long is located on the east side of the river and extends from the dam southerly to a point where the railroad, 1.2 miles east of Loch Raven Station, meets it at grade. This arrangement of highways, railroads and sidings, offered several means of handling the work of construction.

The contract was awarded to the Whiting-Turner Construction Company of Baltimore on April 6, 1921, and about July 1, the first concrete was deposited. The bulk of the work was completed by January 1, 1922.

The specifications permitted the use of cyclopean concrete, but the contractor installed a chute system for distribution, which precluded the depositing of large stones, except in the east shore section, where a derrick, used for excavating the east abutment, swung a portion of the larger stones into the dam. The chute system was designed by the Lakewood Engineering Company.

On the west side of the river, the topographical conditions were ideal for a gravity plant. The contractor, availing himself of this advantage, placed his crusher, storage bins and mixing and distributing plant up and down the west hillside just south of the site of the dam, although the city siding on the opposite side of the river connected the dam directly with the main line of a railroad.

Cement was the only material hauled by railroad. On the hillside below the siding at Loch Raven Station, a cement house was built with a capacity of 5000 barrels. The cement was here received in bags and handled by a belt conveyor operated by a gasoline engine which also operated a bag shaker consisting of a wire cage rotating about seven minutes for each charge. By means of a chute the bags of cement were passed to trucks. The trucks transported the cement to a 200 bbl. capacity shed located on the hillside above the plant, whence it was conveyed directly to the mixer platform by chutes.

The neighborhood sand is generally not suitable for concrete, but the contractor found an excellent sand pit about two miles from the dam. The cost of sand at the pit was 24 cents per cubic yard and the cost of trucking 44 cents per cubic yard, making a total of 68 cents for the sand delivered. The quotation for river sand shipped from Baltimore was 70 cents per ton plus \$1.14 for freight, which is the equivalent of \$1.45 per cubic yard. The contractor was thus saved 75 cents per yard and the delays consequent to rail shipment. The sand was excavated by a three-quarter yard revolving steam shovel and transported by motor trucks to a point above the plant and dumped directly into a hopper at the elevation of the highway, from which a belt conveyor carried it to two large storage bins, one of which is located on each side of the stone bin. The total capacity of the two bins is 500 cubic yards.

The sand contained a maximum of 10 per cent of clay which was twice the amount authorized by the specifications. It was accepted only after thorough tests were made. One to three mortar briquettes showed an average of 250

pounds per square inch, which is 50 pounds above the standard requirement. At different times, as the work progressed, 4-inch cubes were made from concrete, as it passed from the chutes into the dam. The compressive strength of these cubes at the end of 28 days averaged 1800 pounds for 1-3-6 concrete and 2220 pounds for 1-2-4 concrete. The sand was well graded from small to large and contained a considerable percentage of gravel for which reduction was made in the stone. The clay seemed to lubricate the concrete, causing it to be more easily mixed, chuted and worked. The concrete produced a smaller amount of laitance than is usual and honeycombing is almost entirely absent from the dam.

The stone was taken from the city quarry with no expense other than that of actual quarrying. For each blast, two large well drillers were used to put down about 10 holes, 12 feet apart and 85 feet deep, located parallel to and 20 feet back of the quarry face. Three large blasts, each requiring about 4200 pounds of dynamite, made at different times as the work progressed, were required to throw down the necessary 45,000 yards of rock. After each shot considerable secondary drilling was done by various kinds of drills, and tripod and jackhammer, besides a large amount of mud capping, in order to reduce the stone to steam shovel size. The air used by the drills was piped from the power plant situated below the dam. A three-quarter yard shovel used at the beginning of the job soon proved insufficient and was replaced by a 90 ton Marion shovel for loading the stone into dump cars.

The cars were hauled a half mile to the dam over a 36-inch gauge track by an 18 ton dinkey, 4 cars constituting a train. As the track approached the dam, it was elevated on a trestle at 5.8 per cent grade and dumped directly into a 1500 ton gyratory crusher. A hoisting engine was used to spot the cars up the incline to the front of the crusher, which enabled the locomotive to return for another train while the first trainload was dumped and crushed. From the crusher the broken stone was raised to an overhead bin by means of a belt conveyor. The stone bin has a capacity of 1000 cubic yards and is located between the two sand bins.

Water for the concrete was taken from the river above the dam and measured by two barrels pivoted on their centers and so placed that each would empty into a mixer by hand. Each barrel had a 2½ inch quick opening valve and a mark on the inside to indicate the quantity of water desired.

The sand and stone bins each discharged through a seperate chute to a hopper placed over a concrete mixer, the hopper being calibrated to measure the quantity of sand and stone required for one batch of concrete and designed to dump all material simultaneously into the mixers. Two one-yard mixers have been used, a Smith tilting mixer and a Ransome non-tilting mixer.

The concrete was elevated from the mixers by buckets operating inside of a double wooden tower 204 feet high and distributed by chutes to the desired points. The concrete buckets were raised by engines, one for each bucket, located at the elevation of the highway about 75 feet above the bottom of the lower pit.

The dam was built in 60 foot lengths, separated by transverse expansion joints extending continuously through the cross sections. Five-sixteenths inch by twelve inch vertical steel plates, placed 18 inches back of the upstream face, are intended to seal the expansion joints. The up-stream face of the dam is composed of 1-2-4 concrete placed in 8 foot lifts extending alternately 6 feet and 7 feet back from the face. The remainder of the section is composed of 1-3-6 concrete. The following concreting procedure generally was followed:

First, a lift of 1-2-4 concrete, 60 feet long between expansion joints was deposited. After twelve hours, the forms

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were removed and 1-3-6 concrete was then deposited in one operation from the back of the 1-2-4 concrete to the downstream face and for a full length between expansion joints. The 1-3-6 concrete was generally brought 1 foot higher than the 1-2-4 concrete. The two grades of concrete thus break joints both horizontally and vertically and the only vertical joints, except the expansion joints, are those between the two grades of concrete.

Six inch by twelve inch horizontal bonding grooves, two feet back of the front face and a 14 inch by 14 inch porous block drain 2 feet further back from the face were placed in the 1-2-4 concrete at the completion of each lift. The bonding groove and groove for the tile drain were cut out by hand as soon as the concrete had sufficiently hardened. The ends of the tile drain are covered with burlap dipped in tar, and the space between the tile and groove filled with dry sand. At each expansion joint, the porous drain enters a three by three foot well, extending vertically upward and downward to galleries respectfully above and below the highest and lowest horizontal joints, by means of which inspection can be made of the seepage through the dam. The lower gallery is drained into the tail water on the downstream side. Vertical bonding grooves two feet wide by seven feet deep and ten feet apart, bond the masonry across the expansion joints.

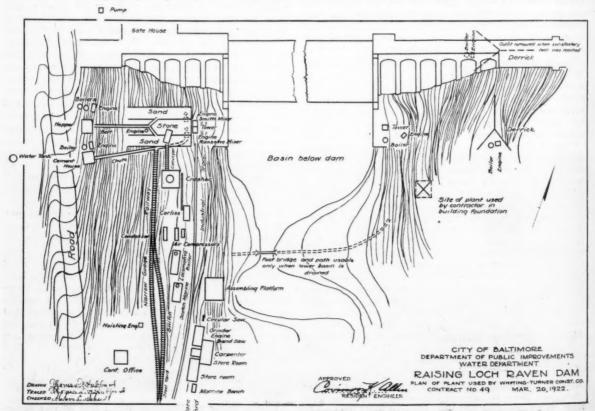
The 1-2-4 concrete shown on the plans for the downstream face was omitted and 1-3-6, deposited as described above, was substituted. The placing of forms on the downstream face presented a problem. There was no way of supporting them from the interior without leaving considerable timber in the concrete, and supporting them from the outside would have been expensive. The problem was solved by wiring the forms to dowels inserted in the existing concrete. A few props held the forms in place ready for pouring. As the concrete was deposited, the pressure soon became suf-

ficient to keep the forms from collapsing, and the props were then removed. It was necessary to drill holes in the old foundation concrete, for the dowels, but above that elevation, at the end of each day's pour, as soon as the concrete had set sufficiently, pieces of scrap pipe were put in place to serve as dowels.

In the gate chamber one 24 by 24 inch and eleven 6 by 3.5 foot gates were placed. The 'specifications provided that all gates be securely blocked and fastened in position before concreting. The gates will be operated by stems varying in length from 50 feet to 75 feet. and were required to be set exactly plumb; but as each gate weighs 4700 pounds, it is practically impossible, with the means available, to sustain them in place while concreting around them. In construction, therefore, the bolts for the gate frames were set as the concrete was deposited and the gates and gate frames were set after concreting of the gate chamber was completed.

The rock stratification on the east hillside is so much inclined from the horizontal that it was impossible to expose a large face without causing a rock slide. It was possible, however, by stepping the foundation to keep a rugged wall of rock against which to place concrete. About 2000 yards of solid rock was estimated, but owing to the sliding tendency, over 5000 were excavated. Excavation for the east abutment was started before completion of the construction plant, yet, due to the difficulties encountered, this portion of the dam was the last completed.

In order to convey concrete from the mixers on the west side of the river to the easterly part of the east abutment, the concrete was rehandled at the east tower. An elevator bucket within the tower was filled from the line chute, then elevated, and the contents emptied into a second chute higher on the tower. The east tower is 168 feet high and the west tower 204 feet high. The towers are 340 feet



PLAN OF CONTRACTOR'S PLANT USED ON CONSTRUCTION OF BIG DAM.

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apart and connected by a 1% foot cable which carries the

The capacity of the plant is about 600 cubic yards of concrete per ten hour day, although at times 700 cubic yards have been placed in the same time. The average per working day was 300 cubic yards. A considerable portion of the contractor's plant had been used before, but the toss due to breakdowns was not excessive. The records of the Resident Engineer show a loss of 483 working hours. Of this time 48 per cent was due to breakdowns and other troubles with the mixers, 22 per cent due to changing and clogging of chutes, 14 per cent due to accidents in the towers and 15 per cent due to lack of forming space and other causes. On the whole the work progressed with rapidity, which was due in part to the hearty cooperation between the contractor and the engineers.

EQUIPMENT

The following is a list of the contractor's equipment:

Marion 31 revolving steam shovel. Erie type "B" revolving steam shovel. Marion 61, railroad type, steam shovel gasoline pumping

Marion 61, rallroad type, steam shovel gasoline pumping outfit.

18 ton Vulcan narrow gauge dinkey.

14 ton American narrow gauge dinkey.

Koppel 4 yd. dump cars.

Western wheel scraper, 4 yd. dump cars.

325 cu. ft. Ingersoll-Rand steam driven air compressor.

160 cu. ft. Chicago Pneumatic Tool air compressor.

Bull Dog 20" Gyratory Crusher—rated capacity, 1500 tons 10 hours. 1 175 H. P. Horizontal Corliss-valve steam engine, driving

1 175 H.P. Horizontal Corliss-valve steam engine, driving rusher.

24" Rock bucket elevator.

20" Belt conveyors—1 driven by 12 H. P. vertical steam engine, and 1 by 12 H. P. Otto gasoline engine.

1 Link-Belt sand washer.

Steam Driven Duplex pump, 6" suction, 5" discharge for general water supply.

2 Duplex boiler feed pumps.

1 5.000 gal. wooden tank for water supply.

1 50 H. P. Locomotive type boiler.

1 50 H. P. Scotch marine boiler.

1 60 H. P. Vertical boiler.

1 30 H. P. Vertical boiler.

1 ngersoil-Rand drill sharpener, air operater.

1 Circular saw.

Band saw.

Band saw.

Grinder

ver operated pipe-threading machine. stractors' equipment—7½x10 double drum hoisting engine

Power operated pipe-threading machine.
Contractors' equipment—7½x10 double drum hoisting engine with boiler.
3 Drum, 8x12 Mundy hoist with boiler.
8½x10 Double drum Lidgerwood hoist with boiler.
8x10 Lidgerwood hoist with boiler.
5x8 Double drum hoist with boiler.
7x10 American double drum hoist with boiler and boom swinger.

swinger.

1 81/x10 Double drum Lambert skeleton hoist.

1 61/x12 Double drum Mundy hoist.

1 Stiff-leg derrick, 15T. capacity with 65 ft. boom.

1 Stiff-leg derrick, 15T. capacity with 60 ft. boom.

1 Stiff-leg derrick, 5 T. capacity with 50 ft. boom.

1 Stiff-leg derrick, 5 T. capacity with 50 ft. boom.

1200 Linear ft. of Lakewod chutes.

2 No. 31/2 Keystone well drills.

About 45,000 yards of concrete are required under the present contract, and the cost of all items will amount to about \$525,000. The principal unit prices are as follows:

Loose Rock Excavation.		 						 			\$ 4.69) per	cu.	yd.
Solid Rock Excavation		 						 			6.6	per		
Concrete for Balustrades		 						 			20.60	per	cu.	vd.
1-2-4 Mass Concrete		 						 			11.8			
1-3-6 Mass Concrete											10.34			
Steel Reinforcoment			•		•	-	•		1	-	. 04	8/ V	or li	4

Fifty thousand eight hundred cubic yards of 1-2-.5-5 and 1-2-4 concrete were placed under a previous contract, the cost of all work under which amounted to \$527,000. The total cost of the dam from bottom to top is therefore, \$1,052,000.

The writer is indebted to Mr. C. K. Allen, resident engineer, for a portion of the information contained in this article.

Hotel Contract at Winchester Involves \$250,000.

Winchester, Va., Aug. 5-[Special.]-The Wise Granite and Construction Co., Richmond, Va., have the contract for the erection of the hotel for the George Washington Hotel Corporation at a cost of \$250,000. It will be 125x105 feet, five stories and a basement, of steel, concrete, brick and stone. Clarence L. Harding, 729 Fifteenth St., Washington, D. C., is the architect.

We Will to Serve.

By O. W. CRAWFORD, Paradis, La.

Service is the biggest word in the world of business. The country which gives the most service will do the most business.

The place which gives the most service will do the most business. The merchant who gives the most service will do the most husiness

You have no right to demand service-but you have a right to expect it. It costs-but it pays. You won't find it in the price list, but without it, you must lower the price to increase the sales.

Service is the present day "lagniappe" of business. It is a patent for profit.

To open the safe of prosperity-turn to the right, to vision, three times to service; three times to truth, then back to service-and, presto! it is open.

The manager of one of the largest hotels in the South said "I am continually asking my company to help me give greater service to our patrons. They expect food and housing, I want to pleasantly surprise them with attentions and comforts they do not expect."

Service fertilizes business. It takes effort to sell, but it should require very little effort to buy. The door of business should be always open.

Let other places wait-we're going. If you do not take advantage of advantages, advantages are of no advantage to

Men-not advantages, make towns and cities. Advantages make the operation easier-but not more certain. James J. Hill, not advantages, made the great Northwest.

General Granville E. Dodge wiped the Great American Desert off the map of the United States.

Without imagination, men stand still. Even money is impotent without vision.

Kropotkin, the great Russian Agriculturist, said "In the hands of men there are no unfertile lands."

Doubters never build-they wait.

Doubters never overcome anything. Caution is no synonym

Doubt means to stop; Caution means to go-but go care-

Build for the faithful, not the doubters.

God made no provision for the doubters, but He made the whole world for the faithful.

Pessimism is an indication of mental decay; depreciation is first cousin to pessimism.

The impulse of depreciation is an evidence of mental retrogression.

Doubters are not fighters, they are resisters; they are retreaters and liable to instant panic; they are assame with a virus which may infect the whole community.

Because you do not know-do not doubt-some one else may know.

The man who believes only what he sees is as close to the Kingdom of Heaven as he will ever be.

\$219,000 Contract Let for Police and Fire Station.

Houston, Tex., Aug. 5-[Special.]-Don Hall, 614 Carter Building has been awarded the contract for erection of the police and fire station at a cost of \$219,000 for this city. W. A. Dowdy, is the architect. The structure will be 100 by 100 feet, five stories high, with steel frame, concrete floors and brick walls.

Plans Complete for Big Hotel at Kansas City.

Kansas City, Mo., Aug. 5-[Special.]-Bids will be received early this month for a ten story hotel and store building to be erected by S. J. Stats, Hotel Plaza, this city. McKecknie & Trask, Gloyd Bldg., are the architects.

Comments of Forestry Expert on Great Southern Lumber Company's Reforestation Work.

After visiting and inspecting the reforestation operations of the Great Southern Lumber Company at Bogalusa, La., J. W. Toumey, dean of the School of Forestry of Yale University, made the following comments on the work in a letter to Vice President W. H. Sullivan, at whose invitation the trip was made:

"In order to make the Bogalusa enterprise an enduring operation, the growth of pine is essential.

"I was gratified intensely by what I saw both in natural regeneration and in artificial regeneration through both direct seeding and planting. In that the company is already working for successive crops of timber, and by past operations has already attained fully stocked stands in limited amount by protecting cut over areas and by direct seeding, as well as by planting, there is existing evidence of the possibility of attaining fully stocked stands of young growth on your property both by natural and artificial means.

"The outstanding points which relate to making your operation continuous in character and which come to my mind from what I saw at Bogalusa are as follows:

"First: In order to place the property on a sustained yield basis it is highly desirable that the acreage should be represented by stands in various age classes. As it is today the remaining stands are virgin timber in which there will be no increase in growth no matter how long they are held. These stands have today as much timber as they will have twenty-five or fifty years hence. The long time holding of them, therefore, will not result in increased yield. That portion likely to be held for twenty-five or more years before they are reached by the felling crews, due to carrying charges and taxes, must when cut, have a stumpage value at least four times that of today. The stumpage having a present value of \$8.00 per thousand must then have a stumpage value of \$32.00 per thousand in order to adequately cover carrying charges and taxes.

"Due to the above reasoning it is my opinion, if a part of the virgin stands, namely, those which will not be reached for twenty-five or more years, could be exchanged through cash transactions for accessible near-by fully stocked second growth on the basis of present values, it would in the end result in large economic advantages for the company and would make possible the distribution of age classes more nearly in keeping with continuous production. The second growth stands thus acquired should vary in age up to fifty years and be of sufficient area to support the operation after present virgin stands are gone, and before the regrowth attained through the coming twenty-five to fifty years is ready for the axe and saw.

"Second. In order to attain necessary regrowth in fully stocked stands on the company's present holdings, two essential things are necessary: (a) all future cuttings must be so organized and carried out that regrowth in stocked stands arises so far as possible as a consequence of the method of logging, and labor protection, (b) present denuded areas that have arisen from past methods of logging and lack of protection must be restocked by artificial means, namely by direct seeding and planting.

"In attaining natural regrowth following lumbering operations, it is obvious from conditions revealed in past practices that the fullest advantage must be taken of every seed year. Immediately following a heavy fall of mast, the area of virgin forest blocked out for cutting within a period of at least five years, must be organized for protection against fire and hogs. The regrowth which follows the fall of mast will survive under the old timber and be available for the new stand after the felling is made. Fires, however, must not accompany the lumbering operations. Complete dependence for regrowth should not be placed entirely on the scattered groups and individual seed trees left under present logging methods, but far more emphasis should be placed than at present, on having a full mast or in having reproduction on the ground when the logging is done and in giving it adequate protection afterward.

"It is my opinion that expenditures made in attaining natural regrowth following full seed years, will in the end bring about restocking, at the least cost to the company. It is evident to me that it will be far less expensive than neglecting natural advance growth on the ground at the time of lumbering and turning to seeding and planting in later years.

"As a summary of this point, it is my opinion that the company should begin to prepare for regrowth following the last full seed year receding each cutting, that more attention be given to having mast or regrowth on the ground when the cuttings are made and that the present practice of leaving seed trees be recognized as largely of supplementary value. In order to carry the above out in practice, the location of the yearly cut must be worked out at least five years in advance of the cutting and measures be taken to protect these areas from fires and hogs. The area of virgin stands brought under protection each year should equal the area cut over in a single year and the total area of uncut timber at any time should be at least five times the area represented in the annual cut.

"Areas of virgin forests in which fires and hogs have done no damage since the heavy mast of 1920 are now completely stocked with young seedlings. Where hogs have had access to the area or where fires have occurred, reproduction is absent or the stocking is fragmentary. In my judgment it is an economic mistake to ignore reproduction until the virgin stand is removed. It should be remembered that as full seed years only occur at intervals of from four to eight years, reproduction from a single crop of seed must supply the regrowth for the whole series of cuttings made during the interval. It is for this reason that the entire area to be cut between successive seed years must be protected, (a) from the time of seedage to the time of cutting,(b) during the period of exploitation, (c) after the regrowth is established. It appears from results already obtained by the company, that natural reproduction in fully stocked stands is obtainable if protection begins following the last full seedage prior to cutting.

"Natural reproduction should be the aim following all future cuttings. It is my judgment, if adequate attention be given to the protective measures outlined above, and if seed trees left are well distributed, there will be little need for artificial regeneration on areas not already denuded.

"From the standpoint of sustained yield over the entire property, it is most unfortunate that the larger part of the area cut over during the past fifteen years is entirely without regrowth. This has resulted, first, from the method of lumbering, and the absence of seed trees, second, from the lack of protection. As a direct consequence of past practices, regrowth on the vast areas cut over in the past is unattainable by natural means. Resort must be made to artificial regeneration which entails large expenditures as compared with the costs for natural regeneration by the methods discussed above.

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"Which method of artificial regeneration, namely, seeding or planting, should be resorted to by the company in bringing regrowth on the denuded areas, merits discussion. If direct seeding is the method practiced, the closest attention must be given to seed collecting during years of heavy seedage, and to seed storage. It should be emphasized that coniferous seed deteriorates more or less rapidly unless subjected to the proper methods of storage, and seeds kept over a single year are likely to be entirely worthless, as was the case with long leaf pine seed in your own operations. Attention must also be given to the time of sowing the seed, preparation of the soil, and the amount of seed used per unit of area. These matters cannot be left to inexperienced men. A delay of a few weeks in collecting seed may find the cones opening and half the seed gone. Wrong methods of storage may result in total loss in the viability of the seed. Lack of necessary soil preparation may result in a complete failure, while the use of excess seed entails unnecessary expense and the use of too few, incomplete stock-

"Results already attained at Bogalusa lead me to express the opinion that artificial seeding properly carried out in which viable seed are used, and the seeding done at the right time on suitably prepared ground will result in fully stocked stands at less cost than regeneration by planting.

"In a large undertaking, however, such as the one at Bogalusa, a nursery must be maintained to provide adequate stock to supplement failures from natural regeneration and from direct seeding. In order of magnitude and importance, efforts at regeneration should emphasize, first, natural regrowth through well organized effort, second, artificial seeding and lastly, planting. All are necessary.

"Planting on a sound and economic basis requires experience and thoroughly organized plans of procedure. A nursery is necessary. The use of wild stock is, in my judgment, uneconomical and almost always entails large loss; the 250,000 of wild stock planted by your company early the present year, although showing but two to five per cent loss two months later when examined by me, will, in my judgment, show a loss of fifty per cent or more by the end of the season. I hope this prediction will not come true, but I feel almost certain that it will.

"The production of nursery stock on a considerable scale cannot be trusted to inexperienced men or haphazard labor. Seed beds, transplant beds, watering, shading, and care lifting the stock, storage before planting, and the planting itself, must not only be carried out in due regard for order and time, but the causes of poor growth and losses must be appreciated and guarded against.

"My conclusion, derived from past experience and my personal visit at Bogalusa where I saw the results in regrowth so far attained are (a) the large area of absolute forest land owned by your company with some twenty-five years' cut of virgin timber ahead, offers one of the greatest, if not the greatest opportunity for continuous operation to be found among private holdings anywhere in the country, (b) the attitude of the officers of the company toward sustained yield, and their apparent willingness to make present expenditure for its attainment, make economic success reasonably certain provided provisions for regrowth are made at the proper time and the technique of methods followed are those that will result in stocked stands at the lowest cost. I believe that the best results cannot be obtained by working along from year to year without well worked out plans for the property as a whole which show for some years in advance the tentative distribution of the annual cut, the acreage to be protected for natural regeneration, and that to be reforested by seeding and planting. A regrowth and reforestation plan for the entire property is desirable even if circumstances require revisions at frequent intervals."

Vocational Education a Need of the Times.

"Vocational Education As Applied to the Hotel Industry," was the subject of an address by Senator Watt T. Brown, of Alabama, before the American Hotel Association at their recent convention in Boston. He emphasized the need of vocational education and pointed out that individuals who do not expect to supplement ordinary school training by college or university courses, should receive vocational instruction of practical and special value according to their purposes in life.

"This," said he, "is a day of special training and the American Hotel Association is to be highly commended and congratulated upon the wisdom and foresight they have shown in the proposed establishment of four schools in the United States to teach and train employes in their line of work. In order to obtain the highest success of which people are capable they must be trained in their chosen profession or trade. * * *

"I am informed that in point of investment the hotel industry ranks fourth—after the automobile industry and before foundry and machine shops products. There are 8100 high grade hotels in the United States and 10,000 below this grade, with a total investment in high grade hotels of \$2,500,000,000. Their annual revenue is about \$950,000,000, with an approximate expenditure of \$500,000,000 for supplies and equipment.

"Education to be effective must be practical in its bearing upon the home, farm and factory. In farming centers we should have schools dealing directly with the problems of farm life; in the cities schools which teach business principles. We need that kind of education which will enable the truck grower to realize greater profits from his produce than he is now getting, the stock grower to raise better stock, the cotton grower to produce more cotton per acre, the manufacturer to make a higher grade of material at less cost, and the Hotel Association to secure more capable and competent help. * * *

"The state of Alabama has established for youths the Alabama School of Trades and Industries at Ragland, and what is true of Alabama will be true of every state in the union when the matter has been brought to their attention."

Gas Supply as Attraction for Industries,

The Board of Trade of Pennsboro, W. Va., is interested in having several plants locate in that section, that will need from 500,000 to 1,000,000 cubic feet of gas daily, according to a letter just received by the Manufacturers Record from John B. Yates, president. A year ago a well of 4,000,000 cu. ft. capacity was drilled in sight of the town, and there is now under construction a pipe line 8 miles long to a field producing eight to ten million feet daily. In addition development is under way on a large area five or six miles north of Pennsboro.

"We would like to have a factory that would consume from one-half to one million feet daily, and employ 200 to 300 men and women," states Mr. Yates, and adds, "We have two window glass plants here which consume 1,000,000 feet each daily, but they do not operate in the hot summer months, and we would like to have a factory or factories that would operate the year round."

\$400,000 Hotel to Go Up in Kansas City.

Kansas City, Mo., July 28—[Special.]—C. O. Jones will erect an 11-story fireproof hotel at 911 Holmes Street, to cost about \$400,000, according to announcement just made. Construction will start within the next four or five weeks, and it is expected that the structure will be finished in ten month's time. The building will be equipped with a cafeteria and roof garden. The architects are Brostrom & Drotts, of Kansas City.

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\$1,000,000 Pennsylvania Sugar Mill in Everglades Near Miami Half Complete.

Miami, Fla., August 5 — [Special.]—The \$1,000,000 sugar mill that has been in course of erection for the past six months in the Everglades for the Pennsylvania Sugar Co., of Philadelphia, is about half complete. It will have a daily capacity for grinding and converting into raw sugar 1000 tons of cane daily. The work is under the supervision of R. E. Webster, a veteran sugar mill builder, and more than 100 men are at work, with the idea of completing the mill by November 1, 1922.

In addition to the most modern equipment utilized in the mill construction there is on the ground a completely equipped machine shop. A standard gauge railway locomotive crane makes it possible to unload materials brought in barges from the municipal docks at Miami. The foundation work embracing approximately 1500 yards of concrete is practically complete. The structural steel for the warehouse is in place and the roof is being finished. Materials are on hand for practically all the necessary work, so that no possible delay will result from the strikes. Most of the materials have been brought to Miami by steam boats.

On its 100,000 acre tract just northwest of this city 3200 acres of cane are now growing—all of this planted within the last three years. Cane has also been planted on nine different sections. W. H. Hoodless, of the Pennsylvania Sugar Co., who recently inspected the property was well satisfied with the work already accomplished and pleased with the outlook for the cane crop.

Second Big Shipment of Railroad Electrification Equipment Leaves Pittsburgh for Chile.

Thirty-three cars of equipment for the electrification of the Chilean State Railways were started last week by wireless from the East Pittsburgh works of the Westinghouse Electric & Manufacturing Co. This is the first time such a feat has been accomplished, and it portends the tremendous possibilities for the use of wireless in railroad work.

The shipment, which was the largest single consignment of electrical apparatus ever made, was the second complete train of such equipment to be sent to Chile in the partial fulfillment of a \$7,000,000 contract awarded in September, 1921. The total shipping weight of the equipment was about 2,400,000 pounds, and it will be more than six weeks in continuous travel by land and sea before it reaches its destination. The shipment of locomotives will commence shortly, 39 being included in the order, including six express passenger, 11 local passenger, 15 road freight and 7 switching locomodium.

Oil and Gas Deposits of the Gulf Coast Country.

By Judge Chas. E. Chidsey, Pascagoula, Miss.

It is with pleasure that I read the short article by Mr. Kirby Thomas, in a recent issue of the Manufacturers Record on oil in Florida, and I hail it as a good omen. In the year of 1920 Mr. Albert Phenis sent me some pamphlets on the conchology of Florida and before I had finished my investigation the fire of February 25, 1921 swept away my library and all of my records. I have been too busy since then restoring my shattered fortunes and my lost library to give the matter the necessary attention—but it was not forgotten, as I am not a quitter. So far as my investigations have gone I find that all of the territory of western Florida, southern Alabama and Mississippi have a like geological character—that is, they owe their origin to the same primeval cause—as a like cause always produces a like effect. Permit me to add that the same law holds good in the political and social world.

Several months ago a stranger dropped in on me; Didge was the name. He did not tell me that he was a geologist—

it was not necessary—he had my communications in the MANUFACTURERS RECORD and other publications on the subject. He was the only "expert" I had ever met who really knew anything of geology and chemistry as a science. We had independently of one another arrived at the same conclusion—that the oil bearing territory extended from the Gulf Coast up through Florida, Alabama, Mississippi and West Tennessee to the "Illinois Basin"—that is, within range of the Great Lakes, and also that all boring along the coast line must go deep—4000 to 5000 feet—and a lesser depth as we ascend the slope of the anti-cline.

I called his attention to the fact that Dr. P. J. Hamilton, in his History of Mobile—writing as an historian and as a geographer, making no pretension to geological knowledge—was the only writer who had observed and noted the fact that all the great rivers east of the Mississippi and in the great valley of the Mississippi flow into that river save the Alabama, and he correctly ascribes the cause to an upheaval which turned that stream into the Gulf. He stated that the thought was a new one to him but recognized its force and cogency.

We found that neither of us had heard any argument against the finding of oil in the territories named save the fossilized one, "There ain't never been any oil found east of the Mississippi," which is no argument at all. "Famous experts" stated that no gold would be found in California and Australia, because there never had been any found there, yet gold was found in California in 1849 and a few months later, February 12, in Australia.

I have at my hand historical data which shows that gold had been found in California many years before Sutters but the friars were keeping it a secret.

Natural gas was found in the Delamorton well, near Pascagoula, in 1910 and the "famous expert," ever ready to show his want of knowledge, contemptiously called it "nothing but marsh gas." The well of the Caddo field, as analyzed by Prof. F. C. Phillips, is as follows:

																											P	er Cent.
Marsh g	as					0					0	۰	0 0		0		 0			۰		0	۰					95.00
Nitrogen									 				 				٠							*				2.50
Carbon	Di	0	εi	d	0																							2.34

Prof. Phillips remarked: "I think you have a valuable fuel in the gas, well suited for household and heating or metallurgical purposes, and for all purposes to which natural gas is appled."

The "Phyllis well" at Montegut, La., shows:

	Per Cent.
Marsh gas	
Olefiant gas	4.450
Carbon Dioxide	1.000
Carbon Monoxide	100
Hydrogen	1.750
Nitrogen	3.500
Oxygen	100
Sulphuretted Hydrogen	.001

Prof. Thiele, who made the analysis said: "The large quantity of methane (marsh gas) found in it is explained by the fact that the gas is the final product of the slow but constant decomposition of the oil deposits underlying. If a sufficient quantity could be secured the gas would prove commercially valuable for heating and mechanical purposes."

The gas at the Delamorton well escaped from a 12 inch pipe for ten months and only ceased when the well caved in and choked up. I have never been able to secure a chemical analysis of the gas of that well, but from personal observations made while it was burning can unhesitatingly say that marsh gas formed only a small percentage of the burning gas. Marsh gas burns with a flame that is peculiarly its own as it never enters into combination with other chemical substances. The Delamorton well demonstrated beyond a doubt that the Gulf Coast terrain lies over a deposit of gas and I would say to "famous experts" that this gas burns, and in burning gives light and heat. The only problem then to be solved is whether there is enough of it.

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Charlotte Sets a New Building Record in July.

Charlotte, N. C., August 7—[Special.]—New buildings begun in Charlotte during July had a valuation exceeding in the aggregate that of any single month in the city's history. In all, 62 permits with a valuation of \$1,515,230 were issued by R. P. Connelly, building inspector. Business buildings headed the list, twelve permits being approved for structures of this character to cost \$1,286,535. Apartment houses and residences involved a big sum.

The hotel building of the Citizens Hotel Co, will necessitate the expenditure of more than \$900,000. The Efird department store when complete will cost \$300,000, and the new building for Biddle University will cost \$60,000, and additions to St. Peter's hospital are estimated to cost about the same amount.

This brings the total building value for the first seven months of 1922 to \$3,546,800, which is far ahead of the value for any year past. In 1921 the permits issued during the entire twelve months totaled but \$2,398,800, and this established a high record.

Big Building Program at Orange, Tex.

Orange, Texas, August 5—[Special.]—A building program involving the expenditure of approximately \$1,500,000 will be under way within the next 60 days here. Included in this program is the bridge across the Sabine river to cost \$200,000; extension of the city wharves and docks at a cost of \$221,000; construction of the new Anderson school building costing \$175,000; and launching of good roads work necessitating the expenditure of \$875,000.

In addition there are hundreds of smaller projects under way and to be started in the near future. Business buildings are being improved and new ones constructed, and many dwellings are being built.

With the extension of the dock facilities, the building of the new bridge and the construction of roads to all parts of the county, Orange is expected to take a big step forward from a business standpoint.

Power Plant Activities in Arkansas and Oklahoma.

Paris, Ark., August 5—[Special.]—The Mississippi Valley Power Co. recently organized, is now operating approximately 60 miles of 33,000 and 13,200 volt transmission line from Alma to Clarksville and Paris, formerly owned by the Commonwealth Public Service Co. Current is purchased from the Fort Smith Light & Traction Co.

The transmission lines operated by the company will form a part of the transmission system connecting Fort Smith with the proposed plant of the Oklahoma General Power Co., at Muskogee, Okla. Construction work on this station will be started at an early date, and its initial capacity will be 10,000 horse power.

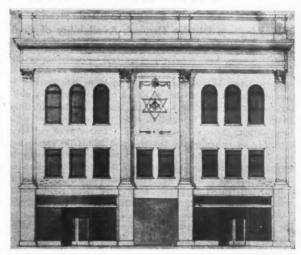
Dock Successfully Towed 1700 Miles.

Mobile, Ala., Aug. 5—[Special]—In bringing to Mobile the 10,000 ton dry dock of the Todd Shipbuilding Co. a really great feat has been accomplished. The first section arrived last week, from the Erie basin in New York. A little coastwise tug of some 300 tons towed the section approximately 1700 miles in 53 days, or at a speed of less than 2 miles an hour.

Work is now progressing upon the company's plant here, and when the work of dredging a slip for the dock is complete and all of the sections are here for assembling it will be available for repair and other work on the largest ships.

Exhibitions of samples of crude oils from a large number of fields, domestic and foreign, are being arranged by the Bureau of Mines at its offices in Bartlesville, Okla., Pittsburgh, Pa., and Washington, D. C. Sample crudes have recently been received from Canada, Peru and Argentina.

NEW MASONIC TEMPLE FOR DAYTONA, FLA.



To be erected for Halifax Lodge No. 81, A. F. & A. M., Addison O'Neill, Chairman, Building Committee; 60x70 feet; brick and hollow tile; terra cotta trim; Johns-Manville built-up roof; cement and wood floors; steel sash and trim; hot water heat; Otis elevator; Jacob Espedahl, Architect.

Fiscal Year Exports of Foodstuffs.

The outstanding features of American foodstuffs export trade for the year ending June 30, 1922, compared with the previous year, have been the very marked increase in the exports of coarse grains—namely, barley, corn, and oats—accompanied by a decrease in exports of both rye and wheat, says the Department of Commerce. The increased exports of coarse grains, especially corn, is no doubt due to the relatively low price of these commodities in the United States, making it possible for Europeans not only to substitute these grains to a greater extent in human food but also to import them as stock food. The exports of corn are practically three times as great as for the previous year, due in large part to the extensive use of corn in relief work.

Rice, which last year reached a very low price, has also enjoyed a much larger export trade and a consequent improvement in price in this country.

The more important meat products show a marked increase in exports for the past year, this especially being true of hams, shoulders, lard, and oleo oil.

The most outstanding decrease in exports that the country has shown for the past year is that of cottonseed oil, which was only about one-third for the past year as compared with the previous year.

Considering the general decline in exports to Europe, the sustained market is all the more attractive.

The total value of foodstuffs, however, is considerably decreased, due largely to the decreased price. The value of the principal foodstuff products amounted to \$780,000,000 in 1922, against \$1,335,000,000 in 1921; the bulk of this decreased value falling on wheat, wheat flour and cottonseed oil.

\$14,000,000 Annual Poultry Sales in West Virginia.

Spencer, W. Va., Aug. 1—[Special.]—As going far to show the coming importance of West Virginia as a poultry state, figures just compiled show that Wood, Roane and Jackson counties alone shipped more than \$2,000,000 worth of poultry products last year. The yearly egg sales in West Virginia aggregate \$9,000,000 and other poultry products are worth nearly \$5,000,000 annually in addition.

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THE IRON AND STEEL SITUATION

Iron, Steel and Coke Being Produced Steadily in Birmingham District Through Availability of Coal -Car Shortage Alone Threatens Production.

Birmingham, Ala., August 7-[Special]-Production of pig Iron and steel is still steady and strong in the Birmingham district. Most of the pig iron and steel in this district is produced with the fuel that is mined by the companies owning the plants; in other words, the coal comes largely from mines which do not attempt to enter the open market with their output. Furnace operations in Alabama have not been disturbed by either of the troubles and industries employing iron and coal in their daily operation have not found it necessary to curtail production much, if any yet, though there is complaint that deliveries are being materially delayed.

Railroads out of Birmingham have not been giving every service possible but are not in position to guarantee delivery. Water routes have been investigated and if there should be the need, there is probability of some relief being sought in that direction, the Warrior river to Mobile and thence by sea-going vessels, or by rail from the center of the Alabama industrial regions to Florence, in the northwestern part of the state, thence by Tennessee river, Ohio and other streams to the Chicago and even St. Louis territory. If the worst would come to the worst the middle west could be reached by the Warrior and Mississippi rivers.

Consumers of pig iron throughout the entire country are making some inquiry as to the ability of Alabama furnace interests to accept business. Two furnace companies continue out of the market. Quotations are given at between \$19 and \$20 per ton, No. 2 foundry, with the latter price being generally asked, delivery being so uncertain. No price has teen fixed as yet for the probable 1923 business, though inquiries are coming in. Ore mines are running day and night, in some instances. Coke production has shown no falling off as yet. Pig iron production in July was in excess of that of June.

Steel mills operations are steady. Repairs are under way in the open hearth department of the big mills of the Tennessee at Ensley. The Gulf States Steel Co., has four of its open hearth furnaces in operation at Gadsden with its full finishing department working. The plant of the American Steel & Wire Co., at Fairfield is in full operation with but little, if any, stock in the warehouse, the wire demand being extraordinarily good, transportation facilities being the only matter under consideration.

Coal production is still strong. Some lines have done exceptionally well under the circumstances lately, the Frisco railroad in particular having made a strong effort and succeeding in moving much more coal westward from the Birmingham district than under ordinary times. The output in Alabama mines has been above the 350,000 tons a week mark, the car situation on the Southern Railway holding down the production. The maximum mark has been 370,000 tons.

Quotations in the Birmingham district are as follows:

PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$19.00 to \$20; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$19.50 to \$20.50; iron of 2.75 to 3.25 per cent silicon, \$20.00 to \$21.00; iron of 3.25 to 3.75 per cent silicon, \$20.50 to \$21.50; iron of 3.75 to 4.25 per cent silicon, \$21.00 to \$22.00; charcoal iron, f. o. b. furnaces, \$30.00 to \$32.00.

OLD MATERIAL.

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Old steel axles						 							 	 	\$15.00	to	\$15.50
Old iron axles				٠	er.										15.00	to	15.50
Old steel rails														 	15.00	to	15.50
Heavy melting steel										,				 	 11.50	to	12.50
No. 1 R. R. wrought										٠	0			 	13.00	to	14.00
No. 1 cast							 ٠.							 	 15.00	to	15.50
Stove plate							 							 	 15.00	to	15.50
Old car wheels						 									14.00	to	15.50
Old tramcar wheels							 							 	14.50	to	15.50
Machine shop turning	8.						 							 	 7.00	to	8.00
Cast iron borings							 							 	 9.00	to	10.00
Cast iron borings (Chen	n)						 	0	0					 	13.40	to	14.00

Iron and Steel Purchases in Anticipation of Strikes Keep Plants Operating.

Pittsburgh, Pa., August 5-[Special]-While operations in the iron and steel producing industry continue to decrease, on account of shortage of coal, the most important point at the moment, perhaps, is the very large production the industry has had during the four months of the coal strike. At long range view, it must be remembered that this coal strike was fully expected by everybody, including the buyers of steel, and last February and March it was the common opinion that a considerable part of the steel then being bought was based on fear that steel production would be restricted by the strike. It is important therefore to bear in mind that the buyers have really received large quantities of steel meanwhile. The steel industry has done well to maintain such large production. under adverse conditions.

Pig iron production in July was at a rate only 1.6 per cent lower than the rate in June, which was the highest rate since December, 1920. As the steel mills may have used a larger proportion of scrap with their pig iron in July than in June it is possible that production of steel was heavier in July than in June, when there was the greatest rate since November, 1920. At the present time, of course, steel production is at a rate considerably below the July rate, and August as a whole will probably show a lower average still.

Production of steel in the four months through July, however, was 40 per cent greater than in the four months preceding April 1, when the coal strike started. That is the significant thing in connection with the coal strike.

That there will be a shortage of steel seems decidedly doubtful. It was supposed a few months ago that buyers of steel were fortifying themselves, endeavoring to build up stocks. Many buyers are exerting pressure on mills to get better deliveries, but there are also reports now of steel consumers instructing mills to decrease shipments. Whether that is because they have not enough coal to operate as they would like or because they wish to liquidate some steel accumulated for just such a fuel condition as now exists, cannot be determined with certainty.

The coal priority system has not affected the steel industry as yet. The industry is operating partly on current receipts of coal and partly on stocks. Decreases in production occur chiefly by blast furnaces banking or blowing out, through not having enough coke. There is enough coal to convert the pig iron available into steel and to roll the steel.

Steel prices are very firm all along the line, although there is very little activity in point of tonnage. While buyers do not care to commit themselves for the late months of the year, producers in turn are altogether unwilling to sell. In point of time the mills are sold up farther ahead than they thought, as their rate of production is decreasing.

For prompt shipment premiums have been the rule for some time past in bars, shapes, plates and sheets among the major ecommodities. These delivery premiums are tending to increase. While bars, shapes and plates are 1.70c for indefinite delivery, prices up to 2.00c are being paid for small lots in some cases. Nails and wire products generally are at basis prices, some mills being able to make early deliveries, others not. The nail demand is exceptionally good for this time of

Connellsville steam coal reached a high point in this movement Wednesday of last week, \$8.50. Then buyers withdrew, and last Tuesday, when \$6.00 coal appeared, buyers took hold again, sending the market up to \$7.00. Connellsville foundry coke got up to \$15.50 last Tuesday, but is a shade easier now.

Pig iron offerings are practically absent, but inquiry is ex-

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tremely light. Quotable prices refer only to prompt shipment and have been stiffening. Two sales of basic, 2000 and 3000 tons respectively, have been made at \$25, valley, so that this market has recovered the \$1 it lost early in July. Last important sales of foundry were at \$25, valley, but buyers could hardly duplicate that price. Malleable has gone at \$27.

Mines of Northern West Virginia Operating Open-Shop.

Fairmont, W. Va., August 6-[Special.]-Under non-union conditions more mines are in operation in northern West Virginia than at any time since the beginning of the strike and more coal was being produced than at any time since June 22, notwithstanding the rail and coal strike. It has required a good deal of courage to start mines in many instances owing to intimidation by striking miners. In some instances injunctions have been obtained to protect the workers, and a guard for every worker has been required in some places to save mine workers from harm. Not all the large companies in northern West Virginia are operating, but several have been successful in getting mines back to a working basis notwithstanding strong union sentiment and the effort of radicals among the strikers to intimidate the men who want to go to work. The West Virginia Coal & Coke Company has been able to resume at Norton, and yet Norton is one of the most radical spots in the state. Approximately half the normal tonnage was being loaded at that place at times during the week. With the resumption of operations by the Buckhannon River Coal Company at Adrian, nearly all the mines at another union stronghold are once again in operation, and working forces are being increased from day to day even without much visible protection.

It has been necessary for a number of companies to bring eviction proceedings in order to secure possession of houses owned by them and to make room for miners who were willing to work, few if any strikers having paid any rent since April 1.

Even Humblest Citizen Should Be Protected in His Lawful Pursuits.

J. L. TOWNSEND, Proprietor, Queenfield and Manskin Farms, Manquin, Va.

I am a farmer living in the back woods of Virginia, but I take the Record and I want to say that I agree with you fully on the tariff, Reserve Bank deflation, and the strikes.

I see today where the courts in Richmond granted to protect railroad property, an injunction in which the strikers were allowed one picket within certain distance of railroad property. Why one? Why should one man be granted a right to abuse another who is doing a lawful thing? I believe that every man, from John D. Rockefeller down to the humblest citizen, should be protected in any attempt he may make to earn an honorable living, and I further believe that the Government should use the whole strength of the Army and Navy augmented by every loyal man in the country, if necessary, to see to it that he has that right.

I hope you will live long to enlighten the ignorant and to stiffen the spine of those in higher places who seem to fear more for their political skins than for the rich heritage that we have inherited from our fathers.

An investigation of the source of infiltrating water in a certain area of the Mexia, Texas, oil field has been started by the Bureau of Mines. The bureau hopes to be able to help materially in preserving this, the most active drilling field in Texas at the present time, from undue damage by water.

RAILROADS

Large Expenditures for Betterments in the Southwest.

Dallas, Tex., August 5—[Special.]—Railroads in Texas now have under way improvement work which will total \$10,000,000 in expenditures and it is probable that this sum will be doubled before the end of the year. Moreover, this aggregate is exclusive of the large amounts spent for new equipment and for repairing old cars.

The largest project now being fulfilled is construction of the Denison classification yards of the Missouri, Kansas & Texas Railway which will cost \$3,000,000. This system has also begun construction at Waco upon a locomotive plant to cost \$800,000 besides a freight station at the same city to cost \$175,000 and a freight depot at Wichita Falls to cost an equal sum. At Dallas the Santa Fe is building a \$325,000 freight depot of which the first \$200,000 unit is in progress of erection, and the Texas & New Orleans Railroad of the Southern Pacific System is reconditioning its tracks from Dallas to Beaumont with burnt ballast at a cost of \$750,000. At Orange the city docks and wharves to be used by the transportation lines will cost \$221,400. At Denison a new round house and car building plant for the Missouri, Kansas & Texas Railway will cost \$500,000 and the same system will extend its freight depot at Fort Worth at an expenditure of \$200,000. There will also be general improvements made to the permanent way, including laying of heavier rails on the Missouri, Kansas & Texas, the Rock Island, the Frisco, the Southern Pacific the Kansas City Southern and the St. Louis Southwestern railroads to require altogether an expenditure of from \$2,000,000 to \$3,000,000.

Plans at the Fort Worth Union Terminal, which will cost from \$500,000 to \$1,000,000, are now under way and specifications for a \$2,100,000 union terminal at Oklahoma City, Okla., have been completed and submitted by the Santa Fe System to other Texas railroads entering that city.

Work that is expected to begin this fall includes construction of a proposed Abilene-Cross Plains railroad to tap the Pioneer oil field and give a direct connection between Waco and Abilene, Tex.; improvement of the Trinity & Brazos Valley Railway's waterfront property at Galveston, construction of a line from Greenville to Dallas and Waco to make a through connection to New Orleans by way of the railroads recently bought by William Edenborn, president of the Louisiana Railway & Navigation Co., and the construction of ferminal facilities at Corpus Christi.

The improvements now being carried out in Texas are but part of the railroad improvements proceeding extensively in the Southwest. Among projects to cost more than \$1,-000,000 each and which have been started are the Santa Fe's second tracking from Yampai, Ariz., to Griffith, \$6,500,000; the Frisco's second track \$1,500,000; the Santa Fe cut off from Ellinor to Eldorado, Kan., \$1,500,000, the Burlington's shops at Denver, \$2,000,000 and the Union Pacific's freight house and other work at the same city, also to cost \$2,000,000.

Organization Plan Now Operative.

The organization plan of the Tennessee Electric Power Co., which is to acquire the Tennessee Power Co., the Chattanooga Railway & Light Co., the Nashville Railway & Light Co., and the Chattanooga & Tennessee River Power Co., has been declared operative and the security holders of these properties who deposited their holdings will be notified by the depositaries as to the time of settlement by payment in either new securities or in cash and securities, as the case may be, under the plan,

Pennsylvania Railroad's \$150,000,000 Improvement

The statement of the Pennsylvania Railroad Co. for June shows gross operating revenue of \$40,260,248; decrease as compared with June of last year, \$3,007,967; operating expenses, \$32,561,050; decrease, \$2,654,544; net railway operating income, \$4.863,653; increase, \$114,540.

During the first six months of the current year, gross operating revenue decreased \$8,423,859, as compared with the same period of last year, but railway operating expenses also decreased \$31,113,706, so that the net railway operating income increased \$24,052,484, the total of the latter for the half year being nearly \$37,000,000. There was no loss in treight revenue during the six months, but a small gain. Passenger traffic decreased.

The company has been increasing expenditures lately for maintenance and it has in contemplation an improvement program which demands the outlay of an aggregate of about \$150,000,000 for additional tracks, new stations and elimination of grade crossings, etc., according to a report from Philadelphia. About \$2,500,000 is to widen the elevated line through Newark, N. J., so as to make a four track road and already \$2,000,000 has been voted to abolish dangerous crossings at various other points. It is also proposed to erect a large shop for building locomotives by the company and the financing therefor has been authorized.

General Railroad Traffic Very Heavy.

Reports made to the American Railway Association by the railroads throughout the country show that notwithstanding the shopmen's strike, the total loading of all commodities other than coal, for the week ended July 22, was the heaviest for this season of the year in their history and also within nine-tenths of one per cent of the peak loadings of October 15, 1920. During the week ended July 22, a total of 861,124 cars were loaded with revenue freight, an increase of 217 cars as compared with the previous week, or 73,090 more than during the corresponding week of last year. Omitting coal, the loadings of all other commodities during the week totaled 785,064 cars or 58,236 cars more than during the corresponding week of 1920, the big traffic year. Coal loadings totaled for the week 76,060 cars or 1274 less than the preceding week, while coke loadings were 9949 cars, an increase of 251 cars.

Railroad Control Changed.

Control of the Roby & Northern Railroad is reported to have been purchased by John D. McCall and J. E. Blain, of Dallas, Tex. The line is seven miles long from Roby, the county seat of Fisher County, Tex., to North Roby, where connection is made with the Missouri, Kansas & Texas Railway. Extension of the line from Roby southward to Sweetwater, Tex., about 25 miles, has been proposed for a long time. Mr. McCall has been elected vice president and general counsel, and Mr. Blain vice president and general manager. Improvements are planned and the extension is being considered.

Improvement in Railroad Income.

Railroad business during June showed a considerable improvement, according to reports from 170 Class 1 railroads to the Interstate Commerce Commission. The aggregate net operating income of these lines for the month was more than \$70,600,000, an increase income of about \$9,600,000 as compared with May and over 47 per cent more than during June of last year. These figures indicate that when returns are received from all of the 201 railroads in Class 1 that their total net operating income for the month will show about \$76,000,000.

Railroad Tax Assessments Raised.

Charleston, W. Va., Aug. 5-[Special]-The West Virginia Board of Public Works has increased the tax assessment upon railroad properties this year to the extent of \$54,000,-000, the total valuation of all railroads in the state, now being given as \$247,106,972. Baltimore & Ohio Railroad is assessed at \$95,000,000; increase, \$13,500,000. Chesapeake & Ohio Railway, \$50,000,000; increase, \$15,000,000; Norfolk & Western Railway, \$50,000,000; increase \$11,112,208; Virginian Railway, \$13,000,000; increase, \$4,250,000; Western Maryland Railway, \$10,000,000; increase, \$2,500,000; Kanawha & Michigan Railway, \$7,500,000; increase, \$1,750,000; Pittsburgh, Cincinnati, Chicago & St. Louis Railway, \$5,100,-000; increase, \$1,100,000; others assessed include the Monongahela Railway, \$3,000,000; Morgantown & Kingwood Railway, \$2,500,000; Kanawha & West Virginia Railway, \$1,-200,000; Wheeling Terminal Railway, \$1,200,000; Cumberland Valley & Martinsburg Railway, \$1,000,000.

The total assessment of street railways in the state was raised from \$16,742,658 to a new total of \$21,150,200.

\$1400 in Prizes for Boys and Girls.

Announcement has been made by directors of agricultural extensions of state agricultural colleges of an offer by the Baltimore & Ohio Railroad Company of two premiums of \$100 each in each of these states: Illinois, Indiana, Ohio, Pennsylvania, Maryland, West Virginia and Virginia, to boys and girls who, during the present year, do the most efficient work as members of boys and girls agricultural clubs.

There will thus be 14 premiums available to boy and girl club members residing in counties traversed by the Baltimore & Ohio Railroad, and they can be used by the winners for either scholarship purposes at a state university or for defraying expenses of an educational trip to the International Livestock Show at Chicago, or to Washington, D. C., which trips will be arranged and supervised by representatives of the railroad.

O. K. Quivey, General Agricultural Agent of the Baltimore & Ohio Railroad, Baltimore, Md., has charge of this subject.

Planters Buy a Line.

A report from Greenwood, Miss., says that the portion of the Webb branch of the Columbus & Greenville Railroad between Itta Bena and Minter City, Miss., 18 miles, has been bought by A. B. Reese, of Itta Bena, as trustee for several planters, from A. F. Gardner, who recently bought the line when it was sold under a court order. It is understood that the new owners paid \$30,000 for the part they wanted; the rest of the road, from Minter City to Webb, it is said, may be abandoned. The planters interested in this deal went into it to be assured of railroad facilities for the products of their plantations. Several towns will be served by the

To Build a Mexican Short Line.

Pachuca, Mexico, Aug. 11-[Special.]-Engineers are making final surveys for the railroad that the British interests which own the Mexican (Vera Cruz) Railway are to build from a connection with the former Hidalgo & Northeastern Railway near Pachuca to Tampico. The concession for constructing this line was granted by the Mexican government a few months ago and it is stated that financial arrangements for rapid construction have been made. This road will form a direct short line between Tampico and Mexico City. B. E. Holloway, of Mexico City is the general manager.

The petroleum experiment station of the Bureau of Mines at Bartlesville, Okla., is being called upon for suggestions as to methods of producing gasoline products which are "doctor sweet" and water white in color.

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GOOD ROADS AND STREETS

North Carolina Highway Commission Lets Road Contracts Totaling \$3,500,000.

Raleigh, N. C., Aug. 2—[Special.]—The State Highway Commission surpassed all previous records with the award last week of contracts for the construction of 100 miles of hard surfaced and 79 miles of gravel roads at a cost of approximately \$3,500,000. This brings the total mileage placed under contract during the last twelve months, to 1600, while the 1922 goal of 1000 miles is now just 100 miles short of fulfillment with five months yet to go.

The exact figures for the 17 projects for which bids were received is something more than \$3,400,000 which is said to be the largest single award of highway contracts ever to be made in this country. Of this amount \$267,000 was for bridges.

Fourteen counties are involved in the hard surfaced projects, five will get soil roads and Union County will get a new bridge. The total mileage of both gravel and hard surface roads was 179.65, which will bring the total mileage contracted during the last three years past the 2500 mark.

One of the most important links in the central highway was included in the projects bid on yesterday. It was Project 236 extending from the Wake County Line to Smithfield, and with its completion, it will be possible to ride from a point thirty miles east of Raleigh to Statesville without leaving a paved road. This is 14.83 of hard surface road and the low bidder was R. G. Lassiter & Co., of Oxford, with a bid of \$419.943.

Another project of considerable importance in this section of the State was a link of the National Highway between Raleigh and Neuse River, a distance of 8.79 to be of hard surface construction and, under the low bid of P. R. Ashby, of Raleigh to cost \$257,116.70 for the roadway with \$29,255.50 in addition for the structures, low bid for which was submitted by a Marion concern.

\$410,000 Additional Road Contracts Let.

Huntington, W. Va., August 5—[Special.]—Cabell county just recently awarded the contract for 10 additional miles of paving to cost \$410,000. The Wayne Construction Co., were the successful bidders for the principal projects. James Doyle secured the contract for a 7 mile stretch of road in Union district to cost about \$70,000. A part of the Long Branch-Wayne road is to be built at a cost of \$140,000. Altogether about \$750,000 in road contracts have been let and are now under way.

Florida County Awards \$250,000 Road Contracts.

West Palm Beach, Fla., August 5—[Special.]—The Board of County Commissioners this week approved bids for road work in districts Nos. 35 and 18 totaling approximately \$250,000. A 7 mile section of road in district No. 15 will cost \$45,000. In district No. 18 a permanent bridge and a temporary bridge together with five different sections of road will cost about \$200,000.

Road Work Hampered by Strikes.

Winston-Salem, N. C., August 5—[Special.]—Orders issued during this week by the Interstate Commerce Commission diverting all open top freight cars to the local coal fields and taking them away from the shipment of stone, gravel and sand for road building will delay highway work in this state. It is said that road work here necessitates the use of 1000 cars a day. Many cars loaded with road materials are standing in freight yards all over the state. Contractors are being seriously hampered, men are being laid off through enforced

suspension of work, and the state's highway program is being retarded. All this is due to the railroad strike, and even if it is settled quickly, the coal situation will hamper the proper and necessary shipment of the vast amounts of materials necessary for road work.

Road and Bridge Contracts Let in Tennessee.

Nashville, Tenn., August 7—[Special.]—Four contracts for the building of roads and bridges in Roane and Obion counties were awarded last week by the State Highway Department. Y. Y. Phillips, of Martin, was the successful bidder for construction of 9.47 miles of road in Obion county, running from Union City to Troy, the bid being \$284,547. Construction of a bridge of 20-ft. span in the same county was awarded to Estes, Williams and Ragsdale Co., of Memphis, at \$26,500.

The building of 10.04 miles of road in Roane county was awarded to J. F. Marcum & Co., Knoxville, for \$277,609. It is to be of rock-asphalt, 18 feet wide, and runs from Rockwood to Kingston.

\$3,000,000 Bond Issue Voted by Hillsborough County.

Tampa, Fla., August 5—[Special.]—By a vote of nearly two to one the county of Hillsborough this week approved a bond issue of \$3,000,000 for the construction of 151 miles of hard surface highways. An extensive system has already been planned and surveys made, so that with the sale of the bonds and actual awarding of contracts work will get under way with the minimum of delay.

TEXTILE

Damage to Texas Cotton May Be Light.

Austin, Tex., August 5—[Special.]—Reports from all over the state indicate that damage from the boll weevil this year will be comparatively light. The fruiting of cotton is heavier than ordinarily and the hot, dry weather of the past few weeks has benefited the plants and minimized the ravages of the insect. In the lower Rio Grande valley farmers are averaging three-quarters of a bale to the acre despite the fact that the boll weevil is eating the top crop. Gins are running full time with the yards jammed with cotton waiting to be ginned.

Textile Mill Notes.

The Princeton Hosiery Mills Co., Princeton, W. Va., chartered with L. H. Perkins and associates with a capital stock \$750,000, will manufacture knit hosiery.

The Standard Cotton Mills of Cedartown, Ga., purchased the Cook Duck Mills, which will be run in conjunction with the Standard plant.

Norris Bros., Inc., of Greenville, S. C., have awarded the contract for the erection of a two-story bobbin factory building to the Gallivan Building Co., of Greenville. The structure will be 40 by 128 ft. J. E. Sirrine & Co., are the engineers.

Bowen Crews Co., Athens, Ga., have been organized with a capital stock of \$50,000 for the manufacture of cotton carded yarns. The initial capacity of the plant will be 1000 pounds daily. It is expected that they will erect a plant of their own within the next twelve months. The officers are:—O. W. Bowen, president; Marion Bowen Crews, vice-president; and W. W. Crews, secretary-treasurer.

LUMBER AND BUILDING MATERIALS

Orders for Common Brick Exceed Supply.

Orders for brick are far in excess of both burned and green brick on hand according to reports from 95 companies members of the Common Brick Manufacturers Association of America, as included in the monthly digest, published August 1. The report in full is as follows:-

"After sailing fairly smooth seas since the beginning of the year, the brick industry is now heading into breakers. This is common with the experience of all industries due to the coal and railroad situation. The coal strike was so well advertised in advance that its actual occurence found the brick men well stocked with fuel. It was believed that the supply would outlast the strike, but the current month's reports indicate that in many sections the manufacturers are at the end of their supply. With production restricted for lack of fuel and manufacturing costs greatly increased on account of advance in prices of coal, still brick prices show practically no change during the past month.

"Big brick producers in Ohio that have contracts with the mines at \$3.50 per ton, which means about \$5.00 to \$5.25 delivered at the plant, are unable to get sufficient coal upon their contracts. When they go into the local market to buy they are forced to pay \$8.50 at the mine or from \$10.00 to \$10.50 delivered at their plants. This makes a difference in the actual cost of manufacturing brick of from \$2.50 to \$4.00 per thousand, according to processes used. This situation is

typical in many states. While several manufacturers report restriction of production and increased cost due to the coal situation, only one plant is actually closed down for lack of fuel. This plant

is located in Illinois.

"On the face of the reports from members the production and shipment of brick shows an increase over the preceding month. The 95 companies reporting, produced last month 106,475,000 brick and shipped from their yards 115,-333,000. The orders on the books are far in excess of both burned and green brick on hand. This condition—of orders in excess of stock-applies to all the eastern and middle western districts. The reversed condition is found only in the south and far west.

"In spite of the increased cost of production the selling price of brick held steady during the past month with only slight raises in one or two points, while the cost of lumber, mill work, and of labor has shown a considerable advance. Clay products have not yet reflected the new condition.

A great deal of construction work is under way in nearly all sections of the country. Notable exceptions are in the agricultural states just west of the Mississippi. That the That the present volume of building will continue under the advancing prices is questioned. Already in Chicago, Cleveland and other central and western cities there is a slowing up of new jobs. Contractors who started ambitious programs in the early season and protected themselves on materials will carry out contracts as far as the cheap materials will last, but they hesitate entering into new contracts at the higher levels.

"Labor is commanding and receiving a pay far above union There is a common report that the efficiency of skilled labor is not as high as it was earlier in the season. The market for building has by no means been satisfied and if both material and labor will keep their feet on the ground and will be reasonable, there is every indication that buildting will not only continue but will increase in volume. For the first time in more than a year, brick manufacturers are reporting a shortage of skilled labor.

"Out of 95 concerns reporting, 54 view the outlook as good; 29 as fair, and only one looks for bad conditions.

opinions reflect the immediate future."

Exports of Southern Pine Lumber Increase.

New Orleans, La., Aug. 2-[Special.]-The last six months have witnessed a pronounced revival of the export lumber trade of the Gulf ports, according to figures compiled and published monthly by the Gulf Coast Record, and included in the monthly statistical statement of the Southern Pine Association.

June exports of Southern pine lumber were the heaviest since October, 1920, and the six months of 1922 total exports of all lumber amounting to 315,192,637 feet, were 46.0 per cent greater than the total exports of all lumber via Gulf ports for corresponding period of last year, but below the first six months total for 1920 and 1916.

Southern pine lumber exports for the six months of 1922 were 37.5 per cent greater than those for similar period last year, while Southern pine timber exports were the largest since 1916 exceeding the past year's six months' total by 26.2 per cent. Exports of all other woods for the six months of 1922 trebled the movement for same period of last year and are the heaviest for any six month period on the records, beginning with January, 1916.

Coal Shortage Threatens Building Industry.

The effect of the coal shortage on industrial operations. already noticeable in reports that some of the large steel mills will probably have to shut down unless the coal strike is settled within the next few weeks, is also being felt by the cement industry and the difficulty of obtaining coal has caused a number of plants to cease operations for the time being. A statement issued by the Portland Cement Association in Chicago points out that the cement industry is the fourth largest consumer of coal in the country, over seven million tons being consumed at cement mills every year. Many of the mills have been having difficulty in securing coal for some time. With the regular source of supply shut off by the strike the mills have been forced to secure coal from more distant mines, at higher prices and a longer haul. As many of these sources are now cut off the situation has become acute and unless the strike adjusts itself in a few weeks more of the plants will be closed, or operated on part time.

Coming at a time when the country is experiencing one of the greatest building booms in its history, a shortage of cement would have a serious effect on every class of construction operation. As cement enters into practically every building that is erected, the cutting off of the cement supply through the coal strike would tie up many of the building projects. A similar effect would be felt by the road construction industry, as cement is used in a large majority of highway programs.

In addition to the coal strike, the railroad strike has a direct effect on the cement supply. The equivalent of 377,-000 box cars of 50-ton capacity each were required to haul last year's cement output to the consumer, and if the strike ties up transportation it will be impossible to get the cement shipped to the points where it is needed.

Southern Pine Sales Hold Up Well.

New Orleans, La., Aug. 4-[Special.]-Orders received by Southern pine mills for the week ended July 28, totaled 3824 cars containing 79,007,664 feet, or an average of 622,-108 feet according to the report of the Southern Pine Association. This compares with an average order per mill for the preceding week of 630,161 feet. The average unfilled order per mill at the end of the week was 2,369,996 feet, an increase over the preceding week.

Production for the week was 75,712,852 feet, giving an average per mill of 596,164 feet. Shipments totaled 3437 cars containing 71,011,857 feet. Shipments for the week were 6.21 per cent below production. Orders were 4.35 per cent above production, and were 11.26 per cent above shipments. The increase in orders on hand during the week amounted to 2.73 per cent.

The summary report for the week is as follows:-

Orders on hand beginning of week	Cars 14,181 3,824	Feet 292,993,641 79,007,664
Total	18.005 3,437	372,001,305 71,001,857
Orders on hand end of week	14.568	300,989,448

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Commendations, Kicks and Comments

"May His Tribe Increase," for He Loved His Fellowman.

JUNIUS H. HARDEN, Piedmont Power & Light Company, Burlington, N. C.-I wish to state:

1. That I make it a point not only for myself, but for all my office force to keep a complete file of the Manufacturers Record.

2. That I have never known your editorials, or the policies of the MANUFACTURERS RECORD except that each rang true on a 100 per cent basis for Americanism, patriotism and progress.

3. It took quite a bit of courage for you to stand for the open

3. It took quite a bit of courage for you to stand for the oper shop when you did it.

4. It took more courage for you to stand for an adequate protective tariff for American industry.

5. It is going to take more courage for you to stand for the development of a type of American citizenship that will be left to fight the battles of this Republic when you and I are gone.

I hope that you will command me personally when I may be of

I hope that you will command me personally when I may be of service to you personally and when I can do anything for the MANU-FACTURERS RECORD, the great journal which you have built and which has seen a prime factor in the development of the South.

Fearless Frankness Greatly Needed.

E. E. Bibb, Secretary, Beckley Hardware & Supply Co., Beckley, W.Va.—We take very great pleasure in enclosing a check covering our subscription to your publication. We desire to say in this connection that we very much appreciate the excellent editorials which appear in your magazine from week to week, covering the great questions that are now facing our nation. We only wish that a great many more would fearlessly write just what they think and go to the public with the same frankness that you do.

Our country as a whole is facing very great problems, and we believe if the public press would view the matter as you do, they would be of very great assistance to those in authority to get these

problems properly settled.

Again we desire to say that we thoroughly appreciate your magazine, and if possible would not be without it.

Amazing Inattention to a Revolting Crime.

THE MORRIS MANUFACTURING Co., El Reno, Okla.—Replying to your inquiry, permit us to advise that we have read all the details of the revolting Herrin crime.

It doesn't seem possible that such a crime could be committed in this country without receiving the immediate attention of our national Government as well as the state government, using whatever measures necessary to put a permanent stop to such outrages.

We take this opportunity to compliment the MANUFACTURERS RECORD on your noble stand for Americanism and righteousness, and we wish to assure you that all of your communications, as well as your invaluable magazine, are read with the most intense interest.

Must Wipe Out the Blot.

HUGHES SPECIALTY WELL DRILLING Co., Charleston, S. C.—Answering inquiry in your circular post card in reference to the Illinois crime and conditions; "Yes, I have read the account of these crimes with horror." Might not Mexico, Turkey and Russia point a finger of scorn to the United States for committing crimes in a wholesale way? I am not prepared to say just what our Government has done or not done, but so far as I know nothing has been done to apprehend these murderers, and the stand that the MANUFACTURERS RECORD has taken is to be commended.

Law Enforcement Is a Business Proposition.

SCOTTSBORO BAPTIST CHURCH, REV. S. L. WILLIAMS, PASTOR, SCOTTSBORO, Ala.—I cannot express my pleasure and approval for the RECORD. A number of the best journals come to my desk, but none of them is in my judgment superior to the RECORD.

I believe that you are doing one of the finest pieces of work in the South, or nation, that is by keeping the matter of law enforcement as a business proposition before the industrial leaders. I shall tell my pastor friends of your work. I hope you will not think me out of place when I say "God bless you."

As It Appears to a West Virginia Coal Mine Superintendent.

E. P. McOlvin, Coal Mine Superintendent, Alpha Portland Cement.
Co., Wolf Summit, W. Va.—I am herewith enclosing check for \$6.50 for my subscription to the Ercord, and I wish to congratulate you on the letters that have been written in your paper regarding our present labor situation. More power to you.

Bids will be received in about 30 days for a high school building at Louisville, Ky., to cost approximately \$400,000. Joseph & Joseph are the architects for the structure which will be 200 by 200 feet and three stories high, of fireproof construction.

MECHANICAL

Concrete Form Clamp and Tightener.

A concrete form clamp for the use of contractors and builders is shown in the picture herewith. It is equipped with a ratchet clamp tightener simple in construction and, it is stated, absolutely "fool proof." The clamp is described as being simple to use, rigid in construction and the heaviest form can be held in place and put on with the least possible time and expense. The cheapest of labor can be employed, it is said, when forms are made up by the use of these clamps.



all the tools needed being a hammer and the ratchet tightener.

Furthermore, it is remarked that the clamps can be put on in one-half the time, the forms being drawn together tightly and the rods do not bend. It is not necessary to bore any holes; there is no wire to be twisted and the rods used are plain,

CLAMP AND TIGHTENER AS APPLIED but they do not bend when the clamp fastens and they are not threaded because that is not necessary.

This clamp, say the manufacturers, will clamp a column which is up to the side of another wall or building; it will also straighten crooked lumber in the forms and hold it firmly. The ratchet tightener makes it possible to work in very close quarters among any number of braces, and it can be operated with a one-quarter turn of the handle. Besides, it is not necessary to tighten a set screw or cam handle as the only purpose is to adjust for different sized rods. The tightener gives great speed in tightening the forms. It is said that the clamp will save about two-thirds of the cost of erecting forms.

The picture shows the clamp and the ratchet tightener as used.

The manufacturers of this interesting and valuable new device are the Victor L. Phillips Co., Kansas City, Mo.

Architects Selected for New Office Building.

Raleigh, N. C., Aug 7—[Special.]—G. Lloyd Preacher & Co., architects and engineers, have been selected as architects for the new ten story office building to be erected by the Odd Fellow's Lodge here. According to present plans, it will be ten stories high with stores on the first floor, offices on the upper floors with the exception of the two top ones, which will be reserved for the lodge. It will have a classical exterior with the top as nearly as practicable, following the details from an ancient temple. Its estimated cost is \$300,000.

Announce Plans for \$450,000 Office Building.

Charleston, W. Va., Aug. 7—[Special.]—The Kanawha Investment Co., of this city, have announced plans for the first unit of a \$450,000 mercantile and office building to be erected here. It will be 161 by 169 feet, eight stories high, E-shaped, of steel and concrete. Mills, Millspaugh & Carmichael Co., Columbus, Ohio, are the architects.

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Construction Department

EXPLANATORY

The Manufacturers Record seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Airplane Plants, Stations, Etc.

Mo., Kansas City—Hangars—Air Terminal Development Co., capital \$20,400, incptd. by Rogers Crittenden, F. H. Harvey and Robt. Lester.

Bridges, Culverts and Viaducts.

Ark., De Vails Bluff—White River Bridge Co., capital \$500,000, incptd. by H. E. and C. C. Bovay, and B. D. Hurt; plans building toll bridge over White River.

Ark., Warren—Bradley County, W. A. Baker, County Judge, plans building 60-ft. bridge across Moro Creek; bids opened Aug. 12.

Fla., Jackson'ille—Duval County Commrs., will build 2 creosoted wood bridges. For full detail see Mchy. Wanted—Bridge Construc-

Fla., Jensen—St. Lucie County Commrs., plan building bridge across Indian River; voted \$125,000 bonds.

Fla., Tampa—Hillsborough County contemplates building Nebraska Ave. bridge over Hillsborough River; award contingent upon passage \$1,000,000 bond issue. Address County Commrs.

Fla., West Palm Beach—Palm Beach County Commrs., Hector Harris, Chrmn., let contract to Luten Bridge Co., at \$10,600, to build reinforced concrete bridge across South Fork of St. Lucie River at Intersection of Stuart-Annie road; arch or slab; girder type.

Ga., Columbus — Muskogee County Commrs. For full details see Mchy. Wanted—Culvert Construction.

Kentucky-State Highway Comsn., Frankfort, Ey., will build following bridges:

Johnson County, superstructure over Big Paint Creek, on Salyersville-Paintsville road Marion County, over Rolling Fork on Lebanon-Campbellsville road.

Lee County, over Big Sinking Creek, on Beattyville-Irvine road; bids opened Aug. 15.

Miss., Jackson—Hinds County, Board of Supvrs., will build wooden bridge. For full details see Mchy. Wanted—Bridge Construction.

Missourl—State Highway Dept., Jefferson City, Mo., will build 6 bridges. For full details see Mchy. Wanted—Bridge Construction.

North Carolina — North Carolina State Highway Comsn., Raleigh, N. C., will build 3 bridges. For full details see Mchy. Wanted—Bridge Construction.

N. C., Whiteville—Columbus County Commrs., plans building 3 concrete bridges across Soles Swamp, near Whiteville.

Okla., Strang—Mayes County, F. C Settle, County Engr., plans expending \$54,000 to build 730-ft. concrete bridge across Grand River, 1½ ml. west of Strang.

Okla., Woodward County plans building 4 steel bridges as follows: over Beaver River, north of Supply, between sections 4 and 5, township 24n, range 22.

3 over North Canadian River, one north of Woodward, between sections 25 and 30, township 23n, range 19; Mutual-Fairview bridge, between sections 5 and 8, township 20n, range 17; votes Aug. 1 on \$210,000 bonds Address County Commrs.

S. C., Bennettsville — Marlboro County Highway Commrs., will build 6 reinforced concrete box culverts, and 4 reinforced concrete bridges. For full details see Mehy. Wanted—Culvert and Bridge Construction.

Tennessee.—State Highway Dept., Nashville, Tenn., let contracts for following bridges:

Between Union City and Troy; 20-ft. span: Obion County, Federal Aid Project No. 54: to Estes, Williams & Ragsdale Co., Memphis. Tenn., at \$26,458.80.

Between Rockwood and Kingston, 20-ft. span; Roane County, Federal Aid Project No. 85; to R. M. Callaway & Co., Lenoir City.

Tenn., Nashville—City. For full details see Mchy. Wanted—Viaduct Construction.

Tenn., Nashville—City, will build concrete and steel viaduct and approaches. For full detalls see Mchy. Wanted—Viaduct Construction.

Tex., Houston—City. For full details see Mehy. Wanted—Bridge Construction.

Tex., Palestine—Anderson County prans building bridge over Neches River on State Highway No. 43, between Anderson and Cherokee County lines; 100-ft. steel span; 300-ft. creosoted timber pile trestle; \$27,000; H. 1. Myers, Chrmn., Good Roads Committee.

Virginia — State Highway Comsn., Richmond, Va., will build 3 concrete and steel bridges. For full details see Mchy. Wanted—Bridge Construction.

W. Va., Clarksburg — Harrison County Court, Clair N. Parrish, Clk., let contracts to Luten Bridge Co., York, Pa, at \$6150, for following bridges:

Richardson, over Robinson's Run; Sawmill. over Harbert Run; Grant Webb, over branch of Little Rock Camp: Hannah, over branch of Little Rock Camp; stone, over Stone Pot Run

To concrete Steel Bridge Co., Clarksburg, at \$6052, for following bridges in Tenmile District.

Jarvisville, over branch of Tenmile Creek:
Payne, over Rush Run; Summerville over
Buffalo Creek; Allen, over branch of Buffalo
Creek; Coffindaffer over Stutler's Fork;
Mount Leveran, over Tanner's Fork

Canning and Packing Plants.

Ky., Lexington—For full details see Flour. Feed and Meal Mills.

La., Monroe-Armour & Co., Chicago, Ill.,

will erect \$75,000 packing plant; W. H. White, Archt., Chicago.

Miss., Crystal Springs—May Products Co., New Orleans, La., will install canning plant in connection with ice factory.

N. C., New Hanover and Pender Counties-For full details see Land Development.

Clayworking Plants.

N. C., Asheville—Urns, Vases, etc.—Felstone Co., capital \$100,000, incptd. by C. Marshall Gravatt, Gustaves C. Reiniger and Blair Taylor.

N. C., Colon-L. C. Isenhour. Co., plans building plant for mfre. of tile and brick.

N. C. ,Pine Hall—Pine Hall Brick Co., incptd. with C. L. Lester, Gen. Mgr., mfre. shale brick; purchased 125 acres and plant of Dan River Brick Co.

Coal Mines and Coke Ovens.

Ky., Bell County—Log Mountain Consolidated Coal Co., organized by merging of Highite Coal Co. Yellow Creek Coal Co., Mingo Coal & Coke Co. and Bennett Fork Coal Mining Co.; has approx. 38,000 acres coal land; daily capacity 2800 tons; contemplate output of 1.000,000 tons annually; Major E. F. Helburn, Middlesboro, Ky., interested.

W. Va., Charleston—Big Creek Coal Co. increased capital to \$75,000.

Concrete and Cement Plants.

La., Winnfield—Concrete Blocks—A. C. Campbell, interested in organizing company to mfre. concrete blocks, arched culveriblocks, tiles, etc.

ocks, tiles, etc.

Cotton Compresses and Gins.

Ark., Hope—A. D. Brown will rebuild cotton gin, burned at loss of \$18,000.

Fla., Jacksonville — Jacksonville Ginning Co., capital \$50,000, incptd. with Lorenzo A. Wilson, Prest.; J. A. Herndon, Secy.

Cottonseed-Oil Mills,

Tex., El Campo — Wharton County Oil Mills, incptd. by Hans Goldmann, A. L. Lawson and H. E. Wilson.

Drainage Systems.

Mo., Benton—For full details see Mchy Wanted—Drainage.

Electric Plants.

Fla. Jacksonville—For full details see Land Developments.

La., Lafayette - City will improve light and water plant; Address The Mayor.

Mo., Jefferson City-Kansas City Light & Power Co., merged with Carroll County Electric Co.

Mo, Mexico—Missouri Utilities Co., Wiley F. Corl, Gen. Mgr., 114 W. Promenade St. will build 5.5 ml. of No. 2 aluminum, 16,500 volt line and New Florence distribution system; construction by owner. (Lately noted)

N. C., Cliffside—Southern Power Co. will build transmission line from Shelby sub-station to Caroleen, Henryetta and Cliffside; construction begun.

Tex., Austin—City, Walter L. Eyres, Electric Commrs., will install 5000 K.W. turbo generator; cost about \$150,000.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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Tex., Brownfield City—City, will improve electric light plant, voted \$16,000 bonds. Address The Mayor.

Tex., Dallas—Dallas Power & Light Co., will erect plant addition, double capacity, approx. cost \$2,180,000. (Lately noted.)

Tex., McLean—For full details see Road and Street Construction.

Tex, Temple—City let contract for white way system on portion of Main St. and Ave, A. Address The Mayor.

Va., Charlottesville—Charlottesville & Albermarle Railway Co., John L. Livers, Prest., will install 1500 K.W. horizontal, 2300 volt steam turbine with condenser and switchboard equipment; bids open. (See Machinery Wanted—Electrical Equipment.)

Va., Norfolk—City, Chas. E. Ashburner, Mgr., will construct sub-station building and complete installation of sub-station equipment, underground distribution and street lighting to serve grain elevator now under construction; for municipal terminal project; bids open Aug. 17; plans obtainable from Folwell-Ahlskog Co., 600 Seaboard Bank Building.

Flour, Feed and Meal Mills.

Ky., Lexington—Dunn Wheat Co., lately noted incptd. with \$100,000, organized with Jaff T. Dunn, Prest.; John R. Cain, Mgr., 602 N. Broadway, plans erecting plant with wheat elevators; fireproof; install complete canning mchy., wheat fans, blowers, steamers, steam retorts, boilers, wheat polishing machine, brush type; daily output cereal food; invites bids. (See Mchy. Wanted—Canning Mchy.; Wheat Elevator Equipment.)

Foundry and Machine Plants.

Miss., Hattiesburg—Machinery — Rockett Foundry & Machine Works, N. W. Rockett, Prest., will erect plant addition, install equipment; approx. cost \$10,000.

Mo., St. Louis—St. Louis Boiler, Tank & Machine Co, incptd. by F. M. Jones, H. E. Tuepker and G. G. Main,

N. C., Burlington—Machinery—Thompson Foundry & Machine Works merged with Universal Heater & Metal Mfg. Co., Charlotte; capital \$75,000; organized with W. N. Thompson, Prest. and Treas.; C. W. Sexton, Char-

W. Va., Huntington—Universal Machine & Mfg. Co., capital \$25,000, incptd. with G. O. Rhodes, Prest.; C. R. Schurman, Secy. (Supersedes recent item.)

Gas and Oil Enterprises.

Ala., Gadsden—Tri-City Gas Co. let contract for installation of additional gas producing unit.

Ark., Miller County—Ohio-Red River Oil Co., Youngstown Ohio, capital \$250,000, organized with A. W. Craver, Prest.; will develop; also acquired holdings in Angelina, Tyler and Jasper Counties, Tex.

Ga., Quitman—Lucille Oil & Gas Co., capital \$100,000, incptd. by H. Turner Brice, Quitman; R. H. Bruce, Oklahoma City, Okla.; Charles L. Harvey, St. Petersburg, Fla.

Ky., Bowling Green—Barnett Petroleum Co., capital \$10,000, incptd. by J. C. William and Samuel Barnett.

La., Lake Charles—Annacoco Oil & Refining Co., reorganized with Hap. Avery, Prest., Lake Charles; W. G. Strange. Secy-Treas., Singer, La.

Mo., Kansas City—Chapman Drilling & Developing Co., capital \$50,000, incptd. by J. C. Chapman, Mary Herschman and E. M. Metcalf.

Okla., Ardmore—Amerada Petroleum Corp., will construct casing head absorption gasoline plant in Amerada Pool, capacity 4,500. 000 cu. ft.; portion of materials purchased.

Tex., Brownwood — Petroleum Producing Co., capital \$20,000, incptd. by E. A. Jordan, T. F. Patterson, J. N. Arvin.

Tex., Dallas—Lone Star Gas Co., let contract \$200,000, to Williams Bros., Tulsa. Okla., to build 25 mi. of 12-in. gas pipe line from Dixie Field to Roberson Field.

Tex., Desdemona—Oakland Gasoline Production Co., capital \$100,000, incptd. by T. W. Cole, N. A. Bigelow and J. I. Kilpatrick.

Tex., Graham—Nash & Winfohr Oil Corp., capital \$50,000, incptd. by James F. Nash, R. E. Winfohr and W. M. Thornton.

Tex., Houston—Terminal Oil & Refining Co., capital \$300,000, incptd. by W. G. Averill, Jr., Miles Bennett, L. E. Chovanetz.

Tex., Vernon—Zacaquiesta Oil Co., capital \$60,000, incptd. by J. O. Bomar, B. S. King and Luther Webb.

Hydro-Electric Plants.

Ark., Russellville—Arkansas Light & Power Co., H. C. Couch, Prest.-Gen'l. Mgr., Pine Bluff, Ark. contemplates constructing new power dam and install modern turbines and water wheels to develop hydro-electric power on Illinois River; approx. cost \$60,000.

Ice and Cold-Storage Plants.

Fla., Lakeland—Lakeland Citrus Co., let contract to Temples & Floyd, to erect 2-story ice storage house.

Fla., Melbourne—William H. Kempler, Deer Park, Fla., will erect 55x80 ft. cold storage building, tile construction.

Tex., Dallas-Oak Lawn Ice & Fuel Co., C.

E. Kennemer, Secy.-Gen. Mgr., will erect ice plant on Gertrude St.

W. Va., Clarksburg—Clarksburg Ice & Storage Co. will erect \$25.000 plant, capacity 4500 tons; plans by engineering dept. of American Ice Co., New York.

Irrigation.

Tex., Amarillo—A. S. Sinnett interested in organizing Canadian River Irrigation Co., plans building dam to irrigate from 300,000 to 1,000,000 acres of Land in Texas; Vincent K. Jones, Civil Engr., Las Vegas, N. M.

Land Development.

Fla., Avon Park—Scenic Highlands Development Co., capital \$550,000, merged with Highland Orange Groves Co.; later contemplates building packing house.

Fla., Jacksonville—City will improve Memorial Park; expend \$15,000; install electric lights; construct sidewalks, etc.; Morgan V. Gross, Chrmn. Citizens Memorial Comm.

Fla., Jacksonville—City will expend \$15,000 on improving and beautifying Memorial Park. Address The Mayor.

Fla., Jacksonville—Realty Co., capital \$250,000, incptd. with Courtland Buckman, Prest.; J. Alvin Register and Herman Ulmer, Secy.

Fla., Tampa—Jones-Wall Realty Co., capital \$200,000, incptd. with T. M. Jones, Prest.; J. Edgar Wall, Secy.-Treas.

Fla., Miami—Ravlin Corp., capital \$50,000, incptd. with F. J. Ravlin, Prest.; C. N. Ravlin, Secy.-Treas.

Ga., Atlanta—Berry, Collins & Co., will develop 150-acre tract on Wealy Rd. for residential section, also 8 acres on Peachtree Rd.

Ky., Covington—Sunlight Realty Co., capital \$40,000, incptd. by George P. Diehl, A. G. and W. F. Simrall.

Ky., Okolona, R. Sta., Louisville—Okolona Bome Bldg. Co. (lately noted incptd., capital \$10,000) organized with C. P. Brooks, Prest.; H. G. Skiles, Secy.-Treas.; develop residential sections. (See Mchy. Wanted—Lumber.)

Mo., Boonville—Commercial Realty Co., capital \$10,000, incptd. by John Cosgroves, T. A. Johnson and C. H. Brokmeyer.

Mo., Boonville—Commercial Realty Co., capital \$10,000, incptd. by John Cosgrove, T. A. Johnson and W. V. Draffen.

Mo., Kansas City—Airminal Investment Co, capital \$60,000, incptd. by W. S. Dickey, F. H. Harvey and R. A. Long.

Mo., St. Louis—American Realty & Investment Co., capital \$50,000, incptd. by H. J. Schmitz, M. E. Kavanaugh and Louis Balbach.

OPPORTUNITIES FOR NEW BUSINESS

THROUGH THE

DAILY BULLETIN

Manufacturers or Machinery and Equipment, Dealers in Railroad and Contractors' Supplies, as well as Architects, Contractors and Builders, find it very profitable to follow up the advance news furnished through our DAILY BULLETIN EVERY BUSINESS DAY IN THE YEAR. It is an authoritative, prompt source of information concerning every industrial and railroad undertaking of any consequence, and likewise all important building operations and municipal improvements in the whole South. The opportunity of getting in correspondence with firms that are in the market is afforded by a daily perusal of its columns.

MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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N. C., Ashville—City Commrs., F. L. Conder, Secy.-Treas., will construct parks, playgrounds, community and recreation center and highways; vote Aug. 22 on \$1,000,000 bonds. (Supercedes recent item.)

N. C., New Hanover and Pender Counties—Hugh MacRae, Wilmington, N. C., plans developing model farm city; improvements include creameries, canneries, machine shops, basket and crate making factories, etc.; also training farm, agricultural station for local cooperative experiments; community center, library, schools and places of amusement.

N. C., Raleigh—Fruitland Orchard Co., capital \$50,000 incptd. by E B. Crow, E. C. Judd and J. W. Adickes,

S. C., Marion—Murrells' Inlet Real Estate Co., organized with M. T. Baker, Prest.; E. T. Hughes, Secy.-Treas.

Va., Richmond — South Hampton Land Corp., capital \$15,000, incptd. with Edwin P. Cox, Prest.; Otis P. Walker, Secy.

Lumber Manufacturing.

Ala., Sylacauge—Wisconsin-Alabama Lumber Co. plans erecting planing mill.

Fla., Palmetto—Palmetto Lumber Co., capital \$25,000, incptd. with W. G. Welles, Prest.; B. F. Mount, Secy.-Treas.

Fla., South Jacksonville—South Jacksonville Lumber & Building Material Co., capital \$75,000, incptd. with C. S. Bennett.
Prest.; Elizabeth B. Duckworth, Secy.-Treas.

Miss., Zelleria, P. O. Eden—Gooch Bros., Bentonia, Miss., will move saw mill from Bentonia; daily capacity of plant 20,000 ft.

Mo., St. Louis—John M. Darr & Sons Planing Mill Co., capital \$20,000, incptd. by F. B. J., Bertha and J. M. Darr

Tenn., Nashville—Southern Lumber & Mfg. Co., L. Frank, Secy.-Mgr., let contract to J. A. G. Sloan to erect 30x150-ft. fire-proof dry kiln, 60x200-ft. factory and 50x200-ft. warehouse, both frame construcion; install \$50.000 machinery, purchased.

Metal-Working Plants.

D. C., Washington—Washington Miller Carburetor Co., capital \$25,000, incptd. by Nat. P. Kemp, R. A. White and Roy I. Neuhauser.

Ky., Lexington—Armstrong Tire Tool Co., incptd. by S. R. Armstrong, H. M. Clay, and others

Mo., Jefferson City—Coat Hangers—Henebergh Machinery Co., capital \$20,000, incptd. by J. A. & L. W. Henebergh, C. L. Beason,

Tex., Houston—Crown Shock Absorber Co., 517 West Building (lately noted incptd.) organized with S. B. Segura, Prest.; P. A. Leckrone, Seey.; will establish plant for the assembling of shock absorbers; install drill presses, vises, etc., complete equipment for enameling and nickel plating; bids open. (See Mchy. Wanted—Enameling and Nickel Plating Equipment; Drill Presses, etc.)

Mining.

Ala., Dekalb and Jackson Counties—Black Fox Coal & Iron Co., capital \$840,000, ineptd. by C. H. Lloyd, Chicago, Sheridan W. Baker, Santa Rosa, Calif., N. B. Kelly, Cincinnati, O.; develop 6000 acres coal and iron lands; contemplate purchase of approx. 100,-000 acres mineral lands in N. E. Alabama.

Ala., Keystone—Keystone Lime Works, organized by W. A. Hammond, Saginaw, Ala., and Geo. L. Scott, Longview, Ala., has plant, will install hydrating mehy. and other equipment; electrically operated; daily capacity 1000 bbls. lime.

Fla., Ocala—Florida Hard Rock Corp., capital \$10,000, incptd. with J. L. Wallace, Prest.; John G. Bowden, Secy.-Treas.

Mo., Eldorado Springs—Zinc., etc.—Eldorado Developing Co. (lately noted incptd., capital \$300,000) organized with A. B. Stricklett, Prest.-Mgr.; L. T. Dunaway, Secy.; will develop 320 acres, present daily output 300 tons; install machinery; open bids in about 2 months.

N. C., Ashboro—Reding Gold Mining Co., Danville, Va., capital \$25,000, incptd. with E. L. Walton, Prest.; Chas. G. Burton, Secy.-Treas.; will develop 125 acres; install mining mchy. (See Mchy. Wanted—Gold Mining Machinery; Boiler; Engine.)

N. C., Waynesville—American Mica Mfg. Co., capital \$100,000, incptd. by Charles S. Creelman, Waynesville; Frank F. and Chas. E. Slocomb, Wilmington, Del.

Miscellaneous Construction.

Fla., Pensacoia—Water Front Improvements—City contemplates improvements on lately acquired water front property. Address The Mayor.

Fla., Tampa—Seawall—Hillsborough County Commrs., contemplates building 2.5 mi. Bayshore Blvd., seawall; award contingent upon passage \$1,000,000 bond issue.

Fla., Tampa—Wharf, etc.—City Commrs., let contract at \$319,858.11 to McGucken, McGucken & Edwards to construct reinforced concrete wharf and transit shed foundation it Municipal slip on Estuary; has \$600,000 available.

La., New Orleans—Levees—Commrs. of Atchafalaya Basin Levee Dist, let following contracts to Tonsey Cabell Construction Co. it \$22,000, Goulden levee in Pointe Compe parish; to Lawrence Nixon & Philips at \$14,-880, Lucky Hit levee; to O. O. Ognen a. \$57,780, Lakeland levee; to Grasser Contracting Co. at \$87,000, Preston levee, all in same parish; to Lower Coast Construction Co. at \$31,500, Port Allen levee in West Batin Rouge parish.

La., New Orleans—Levee—Hirsch & Noble, eceive contract for improvements of Cocolevee; Consolidated Dredging & Mfg. Co., lowest bidder for repairing break in Poydray levee, 100,000 cu. yds. of fill; Board of State Engrs. Courthouse.

Miss., Greenville—Levee—For full details see Mchy. Wanted—Levee Construction.

Okla., Tulsa-Pool-W. C. Garrett interested in construction of wading pool at 23rd and Olympia Sts.

Tex.. Denison—Standpipe—For full details see Mchy. Wanted—Road and Street Construction.

Tex., San Antonio—Storage Tank, etc.—State Board of Control, S. B. Cowell, Chrmn., Austin, Tex., will erect concrete oil storage tank and power house at Southwestern Insane Asylum; bids until Aug. 26; Phelps & Dewees, Archts., San Antonio.

Va., Norfolk—Dredging—Government will widen 40-ft. channel between Hampton Roads and junction of Southern and Eastern branches of Elizabeth River, on east side from 375 ft. to 425 ft.; widening bend in 40-ft. channel abreast of Lambert's Point on east side to width of 750 ft. from channel axis; also widening the resulting channel on east from 525 to 475 ft. from Hampton Roads southward; estimated removal of 1,-125,000 cu. yds. mud; bids until Aug. 23. Address Dist. Engr., Room 15, Custom House, Norfolk, Va.

Miscellaneous Enterprises.

D. C., Washington—Incinerators—District Commrs. let contract at \$16,450 to Sparks Crematory Construction Co., Memphis. Tenn. to erect two incinerators for Trinidad Trash Plant.

Fla., Clewiston—Transportation—Clewiston Terminal Co., incptd. with J. J. O'Brien, Prest.; H. B. Stewart, Secy.-Treas.

Fla., Jacksonville—Walton Seed Co., capital \$10,000, incptd. with A. Walton, Prest.-Treas.; P. A. Walton, Secy.

Fla., Jacksonville—Construction—Hollywood Improvement Assn., incptd. with P. J. Mundy, Prest.; R. E. Stillman, Secy.

Fla., Lake Worth — Amusements — Lake Worth Casino Co., capital \$30,000, Incput, with J. T. Barton, Prest.; J. H. Elliott, Secy.-Treas.

Fla., Miami—Construction—Wage Earners Bldg. & Investment Co., capital \$25,000, Incorporated with N. T. Dean, Prest.; R. A. Roberts, Secy.

Fla., West Palm Beach—Hotel—The Hirsch Co., capital \$25,000, incptd. with Frank Hirsch, Prest.; Alfred H. Wagg, Secy.-Treas.

Ky., Louisville — White Swan Steam Laundry, capital \$10,000, incptd. by W. E. Peak, Isaac Gentry and C. C. Dupin.

Ky., Owensboro—Kentucky Hotels Co., capital \$200,000, incptd. by Fred Hartman, Otto Fowler and A. S. Griffin.

Ky., Owensboro—Owensboro & Rockport Ferry Co., capital \$6000, incptd. by Drury Smeathers, James C. Ellis, Tim Crunk,

Md., Baltimore—Maryland Dry Cleaning Works, will erect 2-story fireproof building at 1917 W. Vine St.; \$10,000; Stanislaus Russell, Archt., 11 E. Lexington St.

Md., Baltimore — Calvert Pictures Corp., capital \$1,000,000, incptd. by Elaine Williams, 3407 Clifton Ave.; Edw. J. Clark, 2403 E. 32nd St.; and Alexander Goodman, 100 W. West St.

Md., Baltimore—Revival Publishing Co., capital \$10,000, incptd. with B. Ambrose, Prest.; S. R. Manchuse, Mgr., 433 Forrest St

Md., Baltimore — Fayette Amusement & Realty Co., 248 Equitable Bldg., capital \$100.000, incptd. by M. Albert Levinson, Alex. & Aaron Kremen.

Md., Baltimore—Printing—State Board of Prison Control, let contract at \$26,000 to West Construction Co., American Bidg., to convert one of old dormitories at Pententiary into printing shop for State-use system; install automobile tag printing mehy. and general printing equipment.

Mo., Jefferson City—Botz Printing & Stationary Co.. let contract at \$33,750 to Hancock & Dean Construction Co., Sedalia. Mo. to erect building; to Thomas Kierns of Jefferson City for heating and plumbing; to Queen City Electrical Co., Sedalia, for lighting equipment.

Mo., Jefferson City—Hugh Stephens Printing Co., will erect 2-story building, approx. cost \$40,000; install modern equipment; has 40x100-ft. site.

Mo., Kansas City—Independent Live Stock Commission Co., capital \$10,000, ineptd. by C. A. Springer, H. M. Pettit and O. A. Pickett.

Mo., St. Louis — Engineering — The Carmichael Cryder Co., capital \$50,000, incptd. by W. P. Carmichael, H. M. Cryder and E. M. Beinbard.

Mo., St. Louis—Victoria Laboratories, incorporated by C. E. Benjamin, C. G. Hinrichs and J. S. Batt.

N. C., Asheville—H. & F. Thermos Co., capital \$10,000, incptd. by Morgan Howells, Asheville; L. T. Wynham, Atlanta, Ga.; W. L. Howells, Charleston, S. C.

N. C., Burlington—Carolina Films Corp., capital \$100,000, incptd. by J. B. Mann, Junipus Harden and others. 922. -

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N. C., Winston-Salem—Dairy—Reynolds-Lybrook Farm Co., D. J. Lybrook, Man-ager, has under construction dairy plant, including concrete dairy building, equipped with private electric power and refrigerating plant; erect modern abattoir; also interested in cattle raising

S. C., Eastover-Curing House-Home-Maid Products Co. (lately noted inceptd, capital \$15,000), organized with F. G. Auld, Prest. Treas.; let contract to erect 15,000 bu. curing Loyal-Covin Contracting Co., Engr., Columbia, S. C.

s. C., Greenville-A. C. Gaddy Decorating Co., capital \$5000, incptd. with A. C. Gaddy, Prest.

S. C., Spartanburg-Carey Transfer & Storage Co., capital \$20,000, incptd. with P. A. Carey, Prest.; T. K. Fletcher, Secy.-Treas.

Tenn., Columbia—Jackson Amusement Co., capital \$5000, incptd. by H. H. Jackson, J. M. Dedman, P. H. Faucett.

Tenn.. Knoxville-Incinerator-City, E. W. Neal, Mayor, invites bids on \$70,000 incinerator.

Tenn., Nashville-Sunday School Publishing Board, 4th and Cedar Sts. will erect 4 stor les; brick and concrete publishing house; \$250,000.

Tenn., Paris-Construction-Paris Development Co., capital \$99,000, incptd. by W. E. Sparks, F. M. Van Cleave and others.

Tex., Decatur-Windsor Farms Dairy Co., capital \$65,000, incptd. by O. M. Shore, M. W. Burch, S. P. Brundage.

Tex., Ft. Worth-Engineering-Helm Mechanical Co., capital \$100,000, incptd. by Clyde Helm, W. A. Bennett and W. M. Moore.

Tex., Houston-Black & White Cab Co., ineptd., L. A. Robertson, J. M. Strong and F W Blackburn.

Tex., Lufkin-West Printing Co., capital \$20,000, incptd. by W. L. West, M. G. Johnson and B. L. Zeagler.

Tex., McGregor.-Lee Hardware Co., increased capital to \$50,000; changed name from Cavitt-Lee Co.

Va., Norfolk-Rosedale Dairy Co., capital \$25,000, incptd. by F. H. Moses, Prest.; E. A. Moses, Secy.

Va., Richmond-Construction-Muhleman & Kayhoe, incptd. with A. K. Muhleman, Prest.; M. E. Kayhoe, Secy.

Va., Waynesboro-Talbot Construction Co., capital \$50,000, incptd. with C. L. Talbott, Prest.; W. H. Talbott, Secy.

W. Va., Sutton-Hardware-Freeman Bros Co., incptd. with I. L. Freeman, Prest.-Treas.; J. B. Freeman, Secy.; merged with Sutton Hardware Co., and Lost Creek Hardware Co., at Lost Creek.

Miscellaneous Factories.

Fla., Palm Beach County-Sugar Mill-F. E. Bryant, Lake Worth, Fla., and others acquired 11,000 acres of land, contemplates establishing sugar mill.

Ga., Atlanta-Atlanta Glass Mfg. Co., capital \$500,000, incptd. with F. J. Cooledge. Jr., Prest.

Ga., Augusta—Metallic Press Cloth Co., Wm. A. Lee, Prest., will establish plant for mfre. of press cloth for oil milling purposes.

Ga., Savannah-Dairy-Savannah Coopermixing machines, grinders, carton filling ma-ative Creamery, Gratz Dent, High School Bldg., opens bids Dec. 1st for construction of creamery, lately noted; 160x142 ft.; mill construction; concrete and brick; cost of buildings, \$45,000; install dairy mchy., cost \$60,000; Bessire & Co., Atlanta, have contract for mehy. built by J. G. Cherry Co.

Ky., Louisville — Radio Development Co.,

ineptd. by William C. Tapp, K. L. Snow and James A. West.

La., Shreveport-Southern Soap Co., Box 602, capital \$100,000, incptd. with W. A. Vickers, Prest.-Mgr.; J. M. Grimmet, Secy-Treas.; will erect plant; install steam vats. chines and other soap making machinery; bids about Sept. 1st; mfre. soaps, soap pow ders and soap products. (See Mchy. Wanted -Cartons : Barrels.)

La., Slidell-Creamery-C. G. Larabee interested in establishing creamery and cheese factory.

Md., Baltimore-Extracts-Acme Distributing Co., 750 E. Lombard St., capital \$10,-000, incptd. by Clarence A. Creidler, Wm. J. Kunnecker and Albert H. Wilson.

Md., Baltimore-U. S. Paper Corp., Calvert Building, capital \$3,000,000, incptd. by Wendell D. Allen, Johnston V. Best and Lewis C. Merryman.

Md. Baltimore-Clothing-Isaac Hamburger & Sons Co., capital \$300,000, incptd. by Albert Berney, Adolph L. Hamburger, Sidney

Mo., Jefferson City—Gollub & Frager Bros. Garment Co., capital \$36,000, incptd. by M. J. Frager, I. M. & A. Gollub.

Mo., Lebanon-Watson Chemical Co., capital \$50,000, ineptd. by C. O. McCain, C. G. and E. I. Watson.

N. C., Mooresville-Mooresville Co-Operative Creamery Co., will erect plant addition; double capacity.

S. C., Sumter—Sumter Creamery Co., capital \$20,000, incptd. with L. D. Jennings, Prest.; C. W. Schmolke, Secy.

S. C., Union-Carolina Remedies Co., F. J. Parham, Secy., plans increasing capital to \$1,000,000.

Tex., Corpus Christi-American Cigar Co., Owensboro, Ky., contemplate building cigar

Tex., Dallas—Dixie Wax Paper Co., capital \$20,000, incptd. by R. G. Smythe, G. C. Embry and J. M. Irwin.

Tex., Houston-Cattle Dip.-Wm. Cooper & Nephew, Inc., Charles E. Timson, Gen a. Mgr. will erect \$50,000 plant for infre. of cattle dip at Magnolia Park.

Tex., Houston-Houston Nut & Products Co., I. Schwartz, 1719 Crawford St., Prest., let contract to Mr. Jackson, to erect 54x1100 ft. and 25x35 ft. sheet metal bldgs.; install electric driven mchy.; daily capacity 1000 bu. shelled products.

Tex., Fort Worth-Mint-Cola Bottling Co., capital \$100,000, incptd. by J. P. Berry and Avery Carter; will erect and equip plant.

Tex., San Antonio—Riegler Confectionery Co., capital \$20,000, incptd. by R. R. Riegler, Victor Keller and Lillian F. Baird.

Tex., Yoakum-Texas Hide & Leather Co., will improve plant, erect \$15,000 hide house.

Va. Hopewell-Hummell-Ross Fibre Corp., reported as contemplating building finishing plant; approx. cost several hundred thousand dollars.

Va., McKenny — Creamery — Chamber of Commerce, K. N. Ellis, Secy., Agricultural Dept., interested in establishing creamery for Dinwiddie and Brunswick Counties.

Va., Newport News-Newport News Shoe Co., capital \$50,000, incptd. by Charles Apetowsky, Prest.; Harry Reyner, Secy.

W. Va., Huntington-Eureka Rubber Preserving Co., capital \$400,000, organized with L. C. Basham, Gen'l. Mgr. will erect combined factory, experimental laboratory, shipping and packing department; mfre. Eureka for preservation of automobile tires.

W. Va., Martinsburg-Hurwitz Creamery | garage on S. 6th St.

Co., Maurice H. Hurwitz, Prest., Charles-Town, W. Va., will erect creamery.

Motor Cars. Garages, Tires, Etc.

Ark., Augusta-W. R. Conner Motor Co., erect 24x50-ft. addition, giving total floor space 8700 sq. ft.

Fla., Palm Beach-Palm Beach Cadillac Co., capital \$50,000, incpd. with H. C. Le-Master, Prest.; F. B. Annadomm, Secy.-Treas.

Ky., Louisville—Brachey Battery Service, capital \$10,000, incptd. by H. C. Brachey, W. A. Reisert and others.

Ky., Louisville-Morton Motor Car Co., capital \$10,000, incptd. by W. J., J. M. and E. L. Morton.

Ky., Louisville-Universal Car Co., N. C. Martin, Prest.-Mgr., 22 W. Oak St., will erect 75x180-ft. fireproof building; bids open Aug. 15; Thomas J. Nolan, Archt. (Supersedes

Ky., Louisville-Filling Stations-Standard Oil Co., will erect filling stations at 1500 W. Oak St. and 3337 W. Chestnut St.

Ky., Providence-Central Auto & Service Co., capital \$20,000, incptd. by J. C. Trader, J. D. Spence and J. L. Herron.

Ky., Wayland—Wayland Motor Co., capital \$10,000, incptd. by M. V. Wicker, G. J. Cottrell and Ira N. Morgan.

La., Lake Charles—Standard Oil Co. let contract to Knapp & East to erect filling station on Ryan and Iris St.; \$25,000.

Md., Baltimore-Maryland Motors, Inc., 414 N. Calvert St., will erect 2 or 3 story, 99x-110 ft. building; brick with Indiana limestone front; approx. cost \$60,000; bidders are Hicks, Tase & Norris, Inc., 106 W. Mad-ison St.; Consolidated Engineering Co., Calvert Bldg.; M. A. Long Co., Munsey Bldg.; West Construction Co., American Bldg.; and Cogswell-Koether Co., 406 Park Ave.; Mottu & White, Archts., 322 N. Charles St. (Lately noted.)

Md., Beltsville—National Highway Garage Co., capital \$10,000, incptd. by Lewis E. Withers, Kennedy Simms and Patrick H. Lawson,

Md. Frostburg-Frostburg Motor Co., capital \$25,000, ineptd. by Alvin B. Stark, Enoch B. and John S. Prichard.

Mo., New Bloomfield-Standard Oil Co. let contract to Charles Clark, Jefferson City, Mo., to erect filling station.

Mo., Russellville-Standard Oil Co., let contract to Charles Clark, Jefferson City, Mo., to erect filling station.

Mo., St. Louis-Automobiles-Frank Steuterman will erect brick, automobile showroom; purchased 50x134-ft. site on Locust St.

N. C., Hendersonville-Willard Service Station will occupy portion of 3-story, 40x70-ft. building on Main St.; to be erected by Mrs. C. W. Hunt, Brevard, N. C.

Tenn., Memphis-Filling Station-Dr. S. T. Rucker, let contract to H. A. Hamby, to erect \$15,000 filling station; tile, brick and steel construction; Mahon & Boadwell, Archts.

Tenn., Nashville-Automobile Accessories-McCracken Products Co., incptd. by S. S. McCracken, Horatio Edwards, P. N. Mitchell.

Tex., San Antonio—Citizens Garage & But-tery Co., capital \$5000, incptd. by W. T. Scott, J. B. Bowen, J. N. Miller.

Va., Petersburg—George L. Williams Motor Corp., capital \$25,000, incptd. with James E. Jordan, Prest.; George L. Williams, Secy. Va., Roanoke—Jefferson Filling Station,

Ince, capital \$25,000, incptd. with F. E. Huff,

Prest.; R. C. Mottley, Secy. W. Va., Clarksburg—Carmichael Motor Co., Floyd Carmichael, Propr., will erect \$40,000

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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W. Va., Fairmont-Beatty Motor Co., organized with Carl E. Beatty, Prest.; will erect 3 story building.

Road and Street Construction.

Ala., Birmingham-City, let contracts to Southern Roads Co., at \$12,455.90, to pave Willow Ave., and at \$11,850 to pave 34th St., between 7th Court and Ave F; A. J. Hawkins, City Engr.

Ala., Carrollton-Pickens County Commrs. Court. For full details see Mchy. Wanted-Road Construction.

Ala., Jasper-Walker County Highway Comsn., L. C. Briton, Chrmn., let contract to J. W. Guin, Birmingham, Ala., at \$28,-501.20, for 3 mi. gravel road from city limits of Dora to Jasper-Birmingham Highway.

Little Rock-Board of Commrs., Ark., Street Improvement Dist. No. 315, let coutract to Cook, Shelby & Bateman, Little Rock, at \$70,000, to pave streets in Dist.; Hugh R. Carter, Engr., 313 Exchange Bank Bldg.

Ark., Little Rock-Board of Commrs., Pulaski Road Improvement Dist. No. 10. For full details see Mchy. Wanted-Road Construction.

Ark, Pine Bluff-City Comsn, let contract to H E. Monk, to pave and lay curb and gutters in Dist. No 61, from Harding to 19th Aves.: to J. P. McNulty, Pine Bluff, to widen Main St., Frank R. Allen, City Engr.

Ark., Pine Bluff-City, Improvement Dist. No. 58, W. C. Reynolds, Commr., will pave and lay curbs and gutters in Dist.; let contract soon; Parkes Engineering Co., Engr., Pine Bluff.

D. C., Washington-Dist., Commrs., Dist. Bldg., let contract to Geo. B Mullin & Co., at \$62,500 to pave following streets and Aves., Ingram, Upshur, New Hampshire, Yuma, Varnun, 2nd, 3rd, Illinois, etc.

Fla., Apopka-City will pave streets; voted \$10,000 bonds. Address The Mayor.

Fla., Bushnell-Sumter County plans following:

Rock asphalt road connecting with Lake

County road, 6 mi. from Wildwood. 4 mi. road connecting Center Hill with Sloan Ridge road.

11/2 mi. Memorial Drive from Sloan Ridge road to Dade Massacre Park, 1 ml. from Bushnell: vote Aug. 29 on \$136,000 bonds. Address County Commrs.

Fla., Clearwater-Pinellas County Good Road Assn., organized with Arthur Johnson, Prest., St Petersburg, Fla.

Florida-Hillsborough County contemplates improving following:

4.78 mi. Seffner road from Lake Thonotossasa to Seffner.

14.74 mi. Hopewell-Tampa road from South Tampa to Plant City.

14.74 mi. Interbay Peninsula, from Bayshore Blvd., northwest of Ballast Point, via Catfish Point, Port Tampa City, Sunset Beach and Memorial Blvd.

.75 mi, Tampa Bay Blvd., from Lincoln to Armenia Aves.

15.13 mi. Citrus Park road from Water and Armenia Aves. to Odessa post-office.

3.56 mi. Armenia Ave. from Tampa Blvd. to Waters Ave.

2.02 mi. Waters Ave., from Armenia to

6.60 mi. Lake Magdalene road from State Road No. 5 west and south towards Armenia and Waters Aves.

6 75 mi. Temple Terrace road from Sulphur Springs to Harney.

mi. Plant City-Thonotosassa from Plant City to brick road at Thonotosassa.

6.65 mi. Midway road from Green Lawn Tea room north.

17.11 mi. Plant City-Pienie road to Hurrah Church.

28.02 mi. Bayshore road from Bryan's Corner to Manatee County line.

11.16 mi. Lithia road from Brandon to Picnic road via Lithia.

2.35 mi. Wimauma road from Wimauma to State Road No. 5.

2.5 mi Bayshore road from city limits to Ballast Point.

12.23 mi. River View brick road: widen from 9 to 16 ft.; award contingent upon passage \$1,000,000 bond issue. Address Coun-

Fla., Jacksonville-For full detail see Land Developments.

Fla., Pensacola-City let contract to John Gerkens for 14 blocks paving; reinforced concrete. Address The Mayor.

Sebring-Highlands County plans building main trunk line from Polk County to Glades County, with laterals to Kissimmee Riber, Crewsville and Hardee County line; may vote on \$500,000 bonds. Address County Commres.

Fla., Tampa-Hillsborough County will lay about 151 mi. hard surfaced roadways; voted \$3,000,000 bonds. Address County Commrs.

Fla., West Palm Beeach-Palm Beach County Commrs., Hector Harris, Chrmn., let contracts to Maule Paving Co., West Palm Beaech and Ojus, Fla., as follows:
6.8 mi. Ocean Blvd. between Delray and

Boca Ratone, at \$47,760.

12 mi. Stuart-Annie road from Hanson Grant to Township line, between Townships 39 and 40 south, at \$87,800.

111/2 mi. hard surface road from Palm City, southward,, westward, eastward, and connecting with Stuart-Annie road, at \$68,-993.60.

5 mi, hard surfaced road from Dixie Highway in Hobe Sound; 4 mi. westward; 1 mi. branch road, at \$21,252.50.

% mi. road from Dixie Highway to Indian River, in Hobe Sound, at \$2821.60 to S. P. Snyder, at \$8120, for resurfacing 21/2 mi. road from County line to Sewell

Point. Ga., Brunswick-City and Glynn County Commrs., plan expending \$350,000 for highway to connect St. Simons Island with main land.

Ga., Cochran-J. C. Urquhart, Mayor, let contract to Sullivan, Long & Haggerty, Bessemer, Ala., at \$30,000, to pave 2nd St. from Dykes St. to Southern Ry. depot; concrete; John H. Lowe, Engr., Albany, Ga.

Ga., Savannah-Chatham County Commrs. For full details see Mchy. Wanted-Road Construction.

Ga., Thomasville-City will pave S. Main St. from Jewel Cotton Mills to Baptist Orphanage; also pave East Guilford to Cemetery St., and Cemetery St. to N. Main; voted \$75,000 bonds. Address The Mayor.

Ga., Valdosta-State Highway Dept., Atlanta, Ga., plans paving road from Valdosta to line between Lowndes and Echols Counties; gravel; let contract soon.

Kentucky .- State Highway Comsn., Frankfort, Ky., will improve following roads: Letcher County, 3.8 ml. Jenkins-Whites-

burg. Pike County, 1.2 ml. Pikeville-Williamson,

Rockcastle County, 2.7 mi. Mt. Vernon. London.

Lee and Estill Counties, 7.2 mi. Beattyville-Irvine.

Magoffin County, 6.7 ml. Salyersville-Paints.

Johnson County, 9.3 mi. Paintsville-Salyersville.

Boyd County, 7.7. mi. Catlettsburg.-Louisa. LeslieCounty, 1.7 ml. Hyden-Hazard. Muhlenburg County, 6 ml. Central City. Calhoun.

Muhlenburg County 8.3 mi. Greenville. Nortonville.

Letcher County, 2.2 ml. Jenkins-Whitesburg; bids opened Aug. 15.

Kentucky-State Highway Comsn., Frankfort, Ky., will lay 11 roads. For full detail see Mchy. Wanted-Road Construction; Stone.

La., Baton Rouge-East Baton Rouge Parish Police Jury, Ward 4, plans laying following:

8 mi. Samuel road, from Baker canal to Parish line.

11 mi. East and West road, from Mount Pleasant to Comite River, through Zachary, 7 mi. Bayou Sara road, from Ward line.

4 mi. road from Zachary to Parish line: vote on \$125,000 bonds.

La., Springfield-Louisiana Highway Comsn., Baton Rouge, La., let contract to L. A. Loustalot, Franklin, La., at \$139,813.65 to gravel surface 17.8 mi. Hammond-Baton Rouge Highway; Sections A and B, Albany to Walker, Livingston Parish.

Md., Baltimore-Board of Awards, Wm. F. Broening, Prest., let contract to P. Flanigan & Sons, 2600 Harford Road, Baltimore, at \$27,514.40 to pave 33rd St. from Ellerslie to Snowden Aves.

Md., Baltimore-City, will pave streets and footways. For full details see Mchy. Wanted -Paving.

Md., Baltimore-Paving Comsn. R. Keith Compton, Chrmn, contemplates paving Overland, Rueckert and Batavia Aves.

Maryland-State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will lay 7 roads. For full details see Mchy. Wanted-Road Construction.

Md., Crisfield-City plans laying % mi. road near Memerial Hospital; F. H. Dryden, Engr., Salisbury, Md., invites bids.

Miss., Canton-Madison County, Board of Supervisors plans surfacing 9.6 mi. road between Doaks Creek and Pickens, connecting Hammond, La. and Memphis, Tenn.; bids opened Aug. 15.

Missouri-State Highway Dept, Jefferson City, Mo., let contracts to O. J. Hanick, St. Louis, Mo., at \$35,369.56 for following:

Lewis County, Federal Aid Project No. 38, on State read from Canton southward and westward:

Sta. .357 plus 29: 24-ft. reinforced concrete deck girder span; 18-ft. roadway; 2 reinforced concrete abutments.

Sta. 387 plus 40; 20-ft. reinforced concrete slab span; 18-ft. roadway; 2 mass concrete abutments.

Sta. 417 plus 99; 20-ft. reinforced concrete slab span; 18-ft. roadway; 2 mass concrete abutments.

Sta. 437 plus 09, 14-ft. reinforced concrete slab span; 18-ft. roadway; 2 mass concrete abutments, skewed.

Sta. 272 plus 20, over Canton Ditch; 30ft. reinforced concrete arch span, spandrel filled; 18-ft. roadway.

Sta. 114 pius 00, over Wyaconda River; 85-ft. steel truss span; three 32-ft. reinforced concrete deck girder spans; 18ft. roadway; concrete pier; reinforced concrete abutments; 3 reinforced concrete bents.

to Allhands & Davis, Joplin, Mo., at \$15,-076.31 for following:

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Sta. 184 plus 11, over Drainage Ditch; 40-ft. I-Beam span; creosoted wood floor; 18-ft. roadway; 2 reinforced concrete abutments.

Sta. 296 plus 92, over Drainage Ditch; 50-ft. I-Beaems span; creosofed wood floor; 18-ft. roadway; 2 reinforced concrete abutments.

Sta. 440 plus 00, over Drainage Ditch; 80-ft. steel truss span; creosoted wood floor; 2 reinforced concrete abutments.

Missouri—State Highway Dept., Jefferson City, Mo., let contracts for following:

Stoddard County, 4.946 mi. State road from Cairo to Poplar Bluff, Federal Ald Project No. 178. Section A: to Allhands & Davis, Joplin. Mo., at \$35,349.98.
Ralls County, 3.8 mi. State road from

Ralls County, 3.8 ml. State road from Owendale to Center, Center to Noonan, Noonan to Perry; State Ald Project No. 20, 168; to O. J. Hanick, St. Louis, Mo., at \$21.513 29. Lewis County, 7.539 ml. State road from Canton southward and westward; Federal Ald Project No. 38; to O. J. Hanick, St. Louis, Mo., at \$85,624.96.

Lewis County, 8.371 mi. State road from Canton northward and southward; Federal Aid Project No. 39; to Gaines Bros., Fairland, Okla., at \$79,856.32; gravel surfacing on all.

McDonald County. 4.972 ml State road from Pineville norward and southward; State Ald Project No. 20,178; to J. P. Wolfenbarger, Neesho, Mo., at \$26,036.10.

Howard County, 4.811 mi. State road from Fayette to Missouri River; State Aid Project No. 2003; to Kerby & Raines. Fayette, Mo., at \$23,231.61; grade and construct drainage structures on all.

Mo., Carthage-City plans paving W. Central Ave. Address The Mayor.

Mo., Cassville—State Highway Dept. Jefferson City, let contract to Cox & Henry, Cassville, at \$8000, to lay 4½ ml. State road north and South from Butterfield; Barry County.

Mo, Fayette-City plans paving Lucky St. Address The Mayor.

Mo., Kansas City—City, Park Board, let contracts to W. C. Mullins Constructing Co., at \$2.64 sq. yd. to pave 52,000 sq. yds. Van Brunt Blvd., between 15th and 31st Sts.; macadam, and at \$5.85 sq. yds. for 7400 sq. yds. concrete gutters; plans paving and curbing 27th St. from Highland to Michigan Aves., through Spring Valley Park; invite bids soon.

Mo., St. Joseph—City, Board of Public Works, let contract to Metropolitan Paving Co., and Land Construction Co., at \$65,-000 to pave Edmond St.

Mo., St. Louis-City. For full details see Mehy. Wanted-Paving.

Mo., Shelbyville—State Highway Dept., Jefferson City, Mo., let contract to W. J. Dugan, at \$17,183, for 4.529 ml. State road from Shelbyville northward and southward; Shelby County, State Aid Project No. 20,129.

Mo., Trenton—City. For full details see Mchy. Wanted—Paving.

North Carolina—North Carolina State Highway Comsn., Raleigh, N. C., will lay 25 roads. For full details see Mchy. Wanted—Road Construction.

N. C., Asheville—For full details see Land Development.

N. C., Fayetteville—North Carolina State Highway Comsn., Raleigh, N. C., let contract to A. J. Waldrop, Knoxville, Tenn., at \$161. 275, for 6 ml. highway between Fayetteville and Hope Mills; Topeka asphalt.

N. C., Greensboro—City plans paving with concrete, Justall Court, between Gaston and Market Sts. Address The Mayor.

N. C., Hillsboro-City, Board of Aldermen, will pave street from uptown to railroad station: plans issuing \$40,000 bonds.

N. C., Salisbury—City. For full details see Mchy. Wanted—Paving.

N. C., Southport—Brunswick County Commrs. For full details see Mchy. Wanted—Road Construction.

N. C., Whiteville—Columbus County Commrs., plan laying 1 mile hard surface road across Soles Swamp near Whiteville.

Okla., Ardmore—Carter County Commrs., will improve 33 ml. highway, including following:

10 mi. Mansville road.

8 ml. Lone Grove-Ardmore road. 4 ml. Hewitt road; hard surface; \$500,000 available; invites bids.

Okla., Dewey-City Commrs. plan paving 7th, 9th and Shawnee Sts.

Okla., Oklahoma City—State Highway Department, Oklahoma City, plans paving 30th St. from city line to Oklahoma County line; County to pay \$200,000; Federal Aid, \$25,000; Invites bids.

S. C., Abbeville—Abbeville County Highway Commrs., J. S. Stark, Chrmn., let contract to McCalla Bros., Lowndesville, S. C., at \$23,500 to lay topsoil surface on following:

8¼ mi. road from Due West to Kay Place. 2¾ mi. branch road via Earline Brigge; 28,000 cu. yds. topsoil.

S. C., Blacksburg—J. B. Belue plans expending \$60,000 for 1 4/5 ml. hard surface road; Highway Comsn. to pay one-half; Carolina Engineering Co., Engr., Wilmington, N. C.

S. C., Columbia—Richland County Permanent Roads Comsn., Arcade Bldg., let contract to Chatham Paving Co., Ga., at \$280.73.38 to pave 15.1 mi. Two Notch road; sheet asphalt.

S. C., Florence—City will pave streets; may vote on \$100,000 bonds. Address The

S. C., Jenkinsville—Fairfield County Highway Comsn., 11th Township, will lay 2 roads. For full details see Mehy. Wanted—Road Construction.

Tennessee—State Highway Dept., Nashville, Tenn., let contract for following:

9.47 mi. road between Union City and Troy, Obion County, Federal Aid Project No. 54; to Y. Y. Phillips, Martin, Tenn, at \$284, 547.84.

10.04 ml. rock asphalt road between Rockwood and Kingston; Roane County Federal Aid Project No. 85; to J. F. Marcum & Co., Knoxville, Tenn., at \$277,309.45.

Tenn., Humboldt—W. H. Dunlap, Mayor, let contract to Cressups Bros., Humboldt, at \$40,000, for 16,875 sq. yds. rock asphalt surface, gravel base; 2960 sq. yds. water table; J. H. Weatherford, Engr., 641 Porter Bldg., Memphis, Tenn.

Tex., Austin.—State Highway Dept., Austin, let contract to Haden & Austin, Houston, Tex., at \$40,149.75 to complete 9.15 ml. Kimbro road; limestone bituminous topping.

Tex., Beaumont—Jefferson County plans 17 ml. State Highway No. 3, from Amelia, Tex., to Liberty County line; concrete; \$560,000; J. B. Peek, County Judge; A. C. Love, County Engr.

Tex., Brownsville—Cameron County plans laying 2 sections concrete road on State Highway No. 12; \$850,000; State Highway Comsn., granted \$200,000 Federal Aid; Oscar C. Dancy, County Judge; W. O. Washington, County Engr.

Tex., Cameron—Milam County, W. C. Gillis, County Judge, let contract to Thomas & Ratcliff, Rogers, Tex., at \$80,743.42 to gravel surface 17.94 mi. State Highway No. 36; County to furnish 39,765 cu. yds, surfacing; Federal Aid Project No. 222; A. F. Mitchell, County Engr.

Tex., Clarksville—Red River County plans gravel surface 17.94 ml. State Highway No. 5-B, Clarksville-English road, from Bowie County line to Clarksville road; \$76,000; R. J. Williams, County Judge; J. B. Rieman, Res. Engr.

Tex., Columbus—Colorado County plans surfacing 11 mi. State Highway No. 3; State Highway Comsn., granted \$15,000; J. C. Hays, County Judge; B. H. Faber, County Engr.

Tex., Daingerfield—J. V: Curnutle, Dist. Engr., Sims, Tex., plans laying 2.8 mi. State Highway No. 1, from Naples to Morris County line; \$27,500; J. W. Carson, County Judge.

Tex., Dallas—City let contracts to Uvalde Paving Co., San Antonio, Tex., to pave Cadez St. from Lamar St to Santa Fe Ry.; Clinton St. in Oak Cliff, from King's Highway to Jefferson Ave., and from Jefferson Ave. to south city limits, plan paving Parry Ave., from Haskell Ave., to Peak St., Stonewall St., from Peak St. to Forney Ave. and Forney Ave. from Stonewall St. to Grand Ave.; plans paving Lewis St. between Greenville and Summitt Aves. Address The Mayor.

Tex., Denison—City will lay additional paving, extend sewerage, erect stand pipe, etc.; voted \$175,000 bonds. Address The Mayor.

Tex., El Paso—City plans paving 11 blocks Fort Blvd., from Piedras to Dyer Sts.; also paving Cotton Ave., from Texas to Overland St.; and expending \$34,153.17 to pave Cotton Ave., from Texas to Wyoming St. Address The Mayor.

Tex., Fort Worth—Tarrant County will pave Vickery Blvd., from end of Bessie St. paving to Cleburne interurban tracks; gravel base; 1-in. asphalt surface; cold mix.

Tex., Fort Worth—City Comsn., let contract to J. F. Wills Construction Co., at \$40,000, to repair certain streets.

Tex., Galveston—Chas. A. Keenan, Mayor, will repair streets; voted \$100,000 bonds; improve Alta Loma pumping station; voted \$125,000 bonds.

Tex., Hallettsville—Lavaca County plans grading and constructing permanent drainage structures on 25 ml. State Highway No. 3-B; \$175,000; \$87,000 Federal Aid granted; F. A. Sommerlatte, County Judge; W. H. Koether, County Engr.

Tex., Houston—Harris County let contract to Smith, Starky & Brown, Houston, to surface with crushed rock base, Galveston road from end paving at Harrisburg to County line; to Haden & Austin, for bituminous rop; total cost \$64,000.

Tex., Jasper—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans to improve 11.2 ml. State Highway No. 8, between Jasper and Horton Switch; Jasper County, Federal Aid Project No. 238; \$145,354; C. B. Neel, County Judge; C. P. Hunter, County Engr.

Tex., McKinney—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approach June for \$277 mi. 16.ft grayel road.

Tex., McKinney—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans for 37.7 mi. 16-ft. gravel road on State Highway No. 5-A; Collin County, Federal Aid Project No. 126; \$560.000; T. Murray, County Judge; F. W. Cawthorne, County Engr.

Tex., McLean—City plans improving streets, water works and electric light system; \$74,000 bonds available. Address The Mayor.

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Tex., Newton—Newton County Commrs. Court. For full details see Mchy. Wanted—Road Construction.

Tex., Newton—Newton County Commrs. Court. J. E. Rausch, County Judge, plans gravel surfacing about 21 mi. State Highway No. 7, from Sabine River to Jasper County line, east and west across Newton County; bids opened about Oct. 15.

Tex., Pittsburgh—Camp County. For full details see Mchy. Wanted—Road Construction.

Tex, Richmond—Fort Bend County plans laying State Highway No. 3; State Highway Comsn., granted \$105,000 additional Federal Aid; also additional 15 ml. State Highway No. 3; granted \$42,000 State Aid; C. D. Myers, County Judge; C. H. Kendall, County Engr.

Tex., San Antonio—Bexar County, Commrs., Court. For full details see Machinery Wanted—Road Construction.

Tex., Sanderson—Terrell County plans highway improvements, including State Highway No. 12; Federal Aid furnished \$200,000; G. J. Henshaw, County Judge, Sanderson; D. E. M. Manigault, State Highway Div. Engr., El Paso, Tex.

Tex., Sequin—Guadalupe County, plans laying 3.4 ml. State Highway No. 3, between Cibolo, and Schertz; gravel; \$37,000; bids received soon; J. B. Williams County Judge; C. E. Sanford, Res. Engr. for Hess & Skinner, County Engrs., Sequin.

Tex., Sinton—San Patricio County plans improving east branch State Highway No. 9; \$120,000; State Highway Comsn., granted \$60.000 Federal Aid; J. C. Houts, County Judge, Sinton; A. C. Pancoast, County Engr., Beeville, Tex.

Tex., Sonora—Sutton County. For full details see Mchy. Wanted Road Construction.

Tex., Sweetwater—Nolan County plans laying State Highway No. 4, north of Sweetwater to Fisher County line; State Highway Comsn. granted \$15,000; A. S. Mauzey, County Judge.

Tex., Tyler—Smith County, Highway Comsn., W. R. Castle, Chrmn., let contract \$229,094.20, for 14.73 ml. State Highway No. 37, from Tyler to Cherokee County line; Federal Aid Project No. 284; D. R. Pendleton, County Judge; D. K. Caldwell, County Engr.

Tex., Waco—U. S. Dist. Engr., Fort Worth, Tex., approved plans for 5.9 mi. State Highway No. 6; \$62,700; J. P. Lester, County Judge; Manton Hannah, County

Tex., Wellington—City. For full details see Mchy. Wanted—Paving.

Va., Charles City—Charles City County, Board of Supervisors will lay 2 roads. For full detail see Mchy. Wanted—Road Construction.

Va., Lynchburg—City Mgr. plans improving concrete sidewalks on Wise, Main, Dearing, 5th, Willow, Wall and Commerce Sts.; bids opened; plans from City Engr.

Va., Lynchburg—City let contract to A. N. Campbell, to grade Y. M. C. A. Island rd.; 1600 ft. Address The Mayor.

Va., Suffolk—City plans paving Washington St. to city limits. Address the Mayor.

Va., Suffolk—Nansemond County plans laying 5 ml. concrete road between Suffolk and Franklin; let contract soon. Address County Commrs.

W. Va., Clarksburg—Harrison County Court, For full detail see Mchy. Wanted— Road Construction.

W. Va., Clarksburg—D. H. Hamrick, City Clerk, let following contracts to Tony Pietro:

Euclid Ave., from Milford St. to Woodlawn Ave., at \$10,922; N. 4th St., from Clark to Baltimore Sts., at \$6,799.05; Hamil Ave., from 6th to 7th Sts., at \$5098.80; Magnolia Ave., at \$13,854.40; School St. at \$5134.84; S. 7th St., from Horner south to end of street, at \$10,290; Virginia St. from Wilson to end of street, at \$7562; to Thomas Keenan, Lee St. from Holden to 3rd, and 3rd, rrom Lee to Mechanic, at \$6742.97; to W. F. Allen; Peck St. from West Pike to end of street, at \$5170.12; St. Clare St. from North to Buchannon Ave., at \$8782.20; Pike St., from Victory High School to end of street, at \$10,846; to Anthony Fiori, W. Pike St., at \$16,048.

W. Va., Wheeling—Ohio County Commrs., let contract to Coss & Otto, Wheeling, at \$15.630.90, to rebuild Glenn's Run 2300 ft. road east of Warwood; concrete; A. C. Hoffman, County Road Engr.

Sewer Construction.

D. C., Washington—For full details see Mchy. Wanted—Sewer Construction.

Fla., Lake Worth—City, J. L. Bosley, Clerk let contract to Bunker & Lockman at \$8s,-713.40 to construct new sewer system; W Randolph, Engr.

Fla., Lake Worth—City let contract to Bunker & Lockman at \$89,713.40, to construct sewers in Districts 1 and 2.

La., Baton Rouge—City will lay 1120 ft. sewer line in O'Connor tract; bids open; A. G. Mundinger. City Engr.

Md., Baltimore—Board of Awards let contract to William Helbach, 651 W. Baltimore St., at \$6396.67, to lay water line to Broening Park.

Md., Baltimore—For full details see Mchy. Wanted—Sewer Construction.

Md., Catonsville—Samuel A. Green, Roads and Sanitary Engr., of Baltimore County, at Towson, begins survey for sewers and disposal plant; approx. cost \$1,000,000. (Lately noted.)

Md., Hyattsville—For full details see Machinery Wanted—Water and Sewer Construction.

Mo., Kansas City—City, Paul A. Hartang, Engr. in charge, will establish joint sewer district for Blue Valley project; with drainuge area of 2200 acres.

N. C., Newton-See Water Works.

Okla., Oklahoma City—City Commrs. let contract at \$490,309.95 to Smith Bros., Dallas, Tex. to construct Lee Ave. sewer.

Okla., Oklahoma City—City opened bids for construction of Lee Ave. storm sewer; Smith Bros., lowest bidder at \$490,309.95. (Lately noted.)

S. C., Gaffney—City wil lextend sewer system. Address The Mayor.

Tex., Dallas—City Comsn. let contract at \$12,484.35 W. G. Cullum to construct sewers on portions of Miller and Greenville Aves.; to R. W. Willis at \$8,978.21 for building sewers on Holmes St. and Hickman Lane; George D. Fairtrace, City Engr.

Tex., Denison-For full details see Road and Street Construction,

Tex., Fort Worth—City will construct two siphons on the intercepting and collector mains of the sewage disposal plant; bidders are: John L. King, West & Womack, H. W. Greenway and Tarrant Construction Co. (Previously noted.)

Tex., Fort Worth-For full details see Water Works.

Va., Norfolk—City will expend \$26,000 on drainage of High St., invite bids, also construct sewer on Little Effingham and Stoneway Sts. W. Va., Wheeling—City let contracts at \$74, 489, to W. J. Weekland Co., Charleston, Va., to construct sewers and manholes on Market, Main and 12th Sts.

Telephone Systems.

Ala., Mobile—Home Telephone Co., capital \$76.800, re-organized with Wm. H. Bryant, Prest. and Gen. Mgr.; E. H. Cady, Treas.; will improve and extend services in both Mobile and Baldwin Counties.

N. C., Wilmington—Stone Towing Co. lst contract for installation of complete wireless receiving and sending outfit also install radio equipment in office.

Tex., San Marcos—San Marcos Telephone Co., Merton Swift, Mgr., will make plant im provements.

Textile Mills.

Ala., Merrimac, P. O. Huntsville—Lawns and Prints—Merrimac Mfg. Co., Ward Thoron, Treas., Boston, Mass., plans erecting cotton mill building; Lockwood-Greene Co., Archts, Atlanta, Ga.

Ga., Athens — Yarns — Bowen Crews Co., Box 1077, lately noted incptd. capital \$50,000, organized with O. W. Bowen, Prest.; W. W. Crews, Secy.-Treas.; will erect mm within 12 months; dally capacity 1000 lbs. cotton carded yarn.

Ga., Athens—Bags—Union Thread Mill, 0. W. Bowen, will install 1400 additional spindles in yarn mill for weaving bags.

N. C., High Point—Melrose Hosiery Mills, R. T. Amos, plans building dye plant and boiler room in connection with mill.

N. C., Hudson—Hudson Cotton Mill, J. O. White, Prest., let contract to install electrical equipment, changing mill from mechanical drive; to Michael & Bivens, Gastonia, N. C. for wiring; Lockwood, Greene & Co., Engrs. Atlanta, Ga.; contract with Southern Power Co., for electric current.

N. C., Lenoir—Lenoir Cotton Mill, M. M. Courtney, Prest. let contract to install electrical equipment changing mill from mechanical drive; to Michael & Bivens Gastonia N. C. for wiring; Lockwood Greene & Co., Engr., Atlanta, Ga.; contract with Southern Power Co., for electric current.

N. C., Shelby—Kiwanis Club interested in establishing \$400,000' textile mill.

N. C., Troutman—Yarns—Hall-Kale Mfg. Co., organized with J. E. Kale, Prest., Lincolnton, N. C.; J. B. Hall, Statesville, N. C.; acquired 85-acre site, will erect plant and equip for mfre. of fine combed yarns.

N. C., Valmead, P. O. Lenoir—Moore Cotton Mill, J. O. White, Prest., let contract to install electrical equipment, changing mill from mechanical drive; to Michael & Bivens, Gastonia, N. C., for wiring; Lockwood-Greene & Co., Engrs., Atlanta, Ga.; contract wiscouthern Power Co., for electric current.

N. C., Whitnel—Whitnel Cotton Mill, G. F. Harper, Prest., let contract to Install electrical equipment, changing mill from mechanical drive; to Michael & Bivens, Gastonia, N. C., for wiring; Lockwood-Greene & Co., Engrs., Atlanta, Ga.; contract with Southern Power Co., for electric current.

S. C., Clinton — Cotton — Clinton Cotton Mills have preliminary plans for electrifying plants Nos. 1 and 2; Robert & Co., Atlanta, Ga., Engrs.

S. C., Greer-Victor-Monaghan Co., Victor plant, let contract to Gallivan Building Co. to erect 2 story addition to cloth room bldg.; J. E. Sirrine & Co., Engr.

S C., Greenville—Judson Mills, B. E. Greer, Prest. Treas. let contract to Gallivan Building Co. to erect addition to cotton warehouse, 922.

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adding 1500 sq. ft. floor space; J. E. Sirrine & Co., Engr.

g. C., Greenville—Norris Bros., Inc., let contract to Gallivan Building Co. to erect 2 story 40x128-ft. bobbin factory bldg.; J. E. Sirrine & Co., Engr.

S. C., Spartanburg-Hosiery-Star Hosiery Mills plan increasing capacity of plant.

Water Works.

Ark., Fort Smith-City, Fagan Boorland, Mayor, will extend water mains, reservoir 15,000,000 gals. capacity per day; cost \$500,-000; Wynkoop Kiersted, Engr., Kansas City, Mo. (Lately noted.)

La., Lafayette-For full details see Electric Plants.

Okla., Tulsa-Water Board acquiring titte to land for right of way for pipe line and lake bed for Spavinaw water project, also setting basin at Mohawk and high pressure reservoir on northern limits of city; surveys about completed; bids open Aug. 15 for construction work.

Md., Hyattsville-For full details see Machinery Wanted-Water and Sewer Construc-

N. C., Newton-City let contract to Electrical Construction Co., Charlotte, N. C., to construct water and sewer system extensions; to Roberts Filter Co., Darby, Tenn., to erect filter plant and equipment; to J. Purser Co., Charlotte, N. C., for pumps.

Okla., Tulsa-For full details see Mchy. Wanted-Water Works.

Tex., Fort Worth-City Comsn., J. C. Lord, will extend water and sewer mains, erect water tower and high pressure centrifugal pumping station; will issue \$500,000 bonds.

Tex., Galveston-For full details see Road and Street Construction.

Tex.. McLean-For full details see Road and Street Construction.

Tex., McLean-For full details see Electric Plants

Tex., Pecos-Pecos Valley Water Users' Assn. plans new valley reservoir project; work includes dam, spillway and outlet, ca-pacity of reservoir at depth of 80 ft. will be 250,000 acre ft. and at 100 ft depth maximum capacity will be 500,000 acre ft.; approx. cost \$3,000,000; Vernon L. Sullivan, Consit. Engr., Mills Bldg., El Paso, Tex.

W. Va., Wheeling-For full details see Mchy. Wanted-Intake Pier, etc.

Woodworking Plant.

D. C. Washington—McDevitt Chair-Bed Co., capital \$150,000, incptd. by Amos W. and Batchelder McDevitt, Lena M. Batchelder.

Fla., Tallahassee-Crates-Simmons & Trawick Crate Co., capital \$20,000, incptd. by J. N. Simmons, Prest.; H. D. Trawick, Secy.

Ga., Macon—Empire Furniture Co., capital \$50,000, incptd. by H. D. Kaplan, C. Julian Toole and Robert Zarks.

N. C., New Hanover and Pender Counties -For full details see Land Development.

Va., Roanoke-Witten-Blankenship Furniture Co., capital \$100,000, incptd. with A. D. Witten, Prest.; D. H. Pannill, Secy.

FIRE DAMAGE

Fire Damage.

Ala., Highland Home—Columbus Rushton's residence; Dr. A. J. Jones' residence also

Ala., Verbena-Alabama Power Co.'s warehouse at Mitchell Dam; loss \$15,000.

Ark., Brinkley-Stout Hospital, Dr. T. J. Stout, owner; loss \$15,000.

Ark., Gum Springs-Joe Greson's cotton gin; loss \$8000.

Ark., Little Rock-State Hospital for Nervous diseases; loss \$100,000.

Ark., Russellville-J. H. Ford's theater and residence.

Fla., Daytona-Palmetto Hotel on South Beach St., owned by Marshall Gardiner.

Ky., Frankfort-Kenner Taylor's residence, Louisville Pike; loss \$20,000.

Ky, Krypton-J. C. Eversole & Co. and York Coal Co.'s stores; Louisville & Nashville R. R.'s depot, W. H. Courtenay, Ch. Engr., Louisville.

Md., Baltimore-Consolidated Gas, Electric Light & Power Co.'s coal handling tower at Spring Garden; loss \$25,000.

Miss., Natchez-National Box Co., T. R. Buckhan, Chicago, Ill., plans installing additional mehy.

Mo., St. Joseph-Lard refinery of Morris & Co.'s packing plant; loss \$100,000.

N. C., East Elkins-Elkins Veneer Co.'s plant; loss \$15,000.

N. C., Maxton-H. C. McNair's residence. Tenn., Nashville — Freeman Talking Ma-chine Co.'s plant, 916 Church St.; loss \$60,000.

Tex., Sequin-Blumberg Bros. Co.'s building.

N. C., Thomasville-Standard Chair Co. C. P. Lambeth, Prest. will probably rebuild wrecked portion of finishing and upholstering department of plant No. 3.

Tenn., Newport-Southern Ry. Co.'s station; loss \$10,000; J. S. Lemond, Ch. Engr., Charlotte, N. C.

Tex., Fort Worth-J. A. Dorsey's residence; Co.'s 55,000 bbl. oil tank; loss \$150,000.

Hy Grandill's residence; H. M. Hearne's residence; dwelling owned by Herbert & Walker Insurance Co.; all at stop 15 near Rivercrest Country Club; loss \$35,000 to \$50,000.

Tex., Graham-Majestic Theater.

Tex., Gilmer-Dickson Orphanage.

Tex., Luling-Luling Oil & Mfg. Co.'s seed house; loss \$30,000.

Tex., Mexia—Marion Machine, Foundry & Supply house; loss \$65,000.

Va., Cape Charles-R. D. Stevens & Son's store at Cobbs Station.

W. Va., Fairmont-Harry B. Coal & Coke Co.'s tipple on Koons Run; loss not estimated.

W. Va., Martinsburg-Louis Lipsic's store and dwelling; loss \$40,000.

Wrecked by Explosion.

Mo., Kansas City—Imperial Restaurant, 805 Main St.; Leader Clothing Store, 801 Main St.; Pantorium, 803 Main St.; Viaduet Hotel, 7 W. 8th St.; Eisen Trunk Mfg. Co.'s building, 807 Main St.

N. C., Denton-Cameron Hotel owned by Smith, Swing & Turner, Lexington; Mrs. Lucinda Garner's residence.

Damaged by Storm.

La., Swartz (R. D. from Monroe)-United Oil & Gas Products Corp.'s 4 warehouses; loss \$10,000.

Tex., Port Arthur-Magnolia Petroleum

BUILDING NEWS

BUILDINGS PROPOSED

Apartment Houses.

N. C., Monroe-Ben F. Houston, Charlotte will erect 2 additional buildings to structure on E. Windsor St. for apartments.

N. C., Winston-Salem-Pope Seals, Bir-mingham, Ala., Thos. Maslin, Winston-Salem, and others, are interested in erection of \$200,000 building on W. Fourth St. adjoining Alexander Apts.; brick; 4 stories; 80x180 ft.; 2 elevators; 30-car garage in basement; 40 apartments.

Tenn., Memphis—O. B. Moore, 696 Tate St., will erect 2 buildings on N. Tucker St.; \$20,000 each; 2 stories; 4 apartments; brick veneer; asphalt shingle roofs; hardwood floors; steam heat, \$1950 each; plans and construction by owner. (Lately noted.)

Tex., Amarillo—Geo. C. Burnett, El Paso, is preparing plans for \$65,000 apartment house

Tex., El Paso-Edward C. O'Keefe, St Louis, will erect \$130,000 building, N. Oregon and Cliff Sts.; 78 x 122 ft.; brick and concrete; steel disappearing kitchen in each apartment; George C. Burnett, Archt.

Tex., San Antonio-Chong Sing will erect apartment and store building, Durango and Concho Sts.; 10 apartments; David A. Lown,

Va., Norfolk-Garden Terrace Corp, will

erect \$200,000 building, Armistead Bridge Rd. near W. Ghent Blvd.; 4 stories and basement; brick, stone and terra cotta; gravel roof; oak floors; steam heat; Herbert W. Simpson, Archt., Board of Trade Bldg. Address owner, care Archt. (Lately noted.)

Association and Fraternal

Fla., Lynn Haven-Acme Lodge No. 222, A. F. & A. M. will erect 3-story building; roof garden; J. W. Crone & Sons, Archts., Winchester, Ky. (Lately noted.)

Ga., Newnan-Coweta Lodge No. 40, A. F. & A. M., will erect \$20,000 temple; 40x100 ft.; 2 stories; tile and brick; metal roof; concrete and wood floors; Scroggs & Ewing, Archts., Augusta. (Lately noted.)

Mo., Kansas City—Gate City Masonic Lodge No. 522, Fred W. Knight, Master, purchased site on 31st St. and Troost Ave. and plans 5-story store and office building, hotel or kitchenette apartment building and 3-story lodge building; office building to be erected

N. C., High Point-Independent Order Odd Fellows plan to organize Odd Fellows Home Co. with capital stock \$30,000 to erect lodge building

Va., Norfolk-Afam Club, A. F. & A. M., Geo. F. Fulford, Chrmn. Bldg. Comm., will erect temple, Residence Park, Ocean View; 2

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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stories; brick; Harvey Abrames, Archt. (Previously noted.)

Okla., Ponca City—E. W. Marland will erect memorial building for Alfred Marland Masonic Lodge and American Legion.

Bank and Office.

Ala., Montgomery—W. L. Shephard plans office building at Moulton and Montgomery Sts.

W. Va., Charleston—Kanawha Investment Co. will erect 8-story building, Summers and State Sts.; first unit, \$450,000; 161x169 ft.; steel and concrete; composition roof; cement and marbleoid floors; 12 stores; 479 rooms; 3 wings; Mills, Millspaugh & Carmichael Co., Archts., 67 E. Long St., Columbus, O. (Lately noted.)

Churches.

Fla., Leesburg—Baptist Church, Rev. S. P. Mahoney, Pastor, will erect \$40,000 to \$45,000 brick church on W. Main St.

Fla., Leesburg-Methodist Church, Rev. J. H. Daniel, Pastor, will erect \$40,000 building.

Fla., Leesburg—Presbyterian Church plans building. Address The Pastor.

Fla., Leesburg — Protestant Episcopal Church will remodel building on Lee St. Address The Rector.

Ga., Columbus—First Baptist Church will erect \$75,000 to \$100,000 Sunday school building. Address The Pastor.

Ga., Macon—Vineville Baptist Church Bidg.
'Comm., D. S. Wagnon, Chrmn., Union Dry
Goods Co., receives bids until Aug. 22 to
erect building; \$100,000; J. M. McMichael,
Archt., Charlotte, N. C.; plans from Mr. Wagnon or Francis Herring, Sec. Bldg. Comm., J.
S. Schofield's Song Co., Macon. (Previously
noted.)

Ky., Louisville—Shawnee Christian Church, Rev. Thos. Wood, Pastor, will erect \$40,000 building, 920 W. Broadway; accommodate 500.

La., New Orleans—Dominican Fathers will erect \$100,000 church, Canal and Olymphia Sts.; steel frame; brick walls; concrete floors; hollow fireproof and interior tile; ornamental terra cotta; electric lights; heating already provided; Toledano, Wogan & Bernard, Archts.

Md., Baltimore—All Saints Evangelical Lutheran Church will erect \$15,000 building, Edmondson and Lyndhurst Aves.; stone. Address The Pastor.

Md., Baltimore—Baltimore Hebrew Congregation, 1914 Madison Ave., Dr. Morris Lazaron, Rabbi, will erect \$35,000 to \$40,000 gymnasium; 53, x 61 ft.; gallery; showers and locker rooms in basement; 2 stories; brick and stone; Louis Levi, Archt., Real Estate Trust Bldg., Philadelphia.

Md., Baltimore—St. Michael's and All Angels P. E. Church, St. Paul and 20th Sts., Rev. Wyatt Brown, Rector, will erect chapel; 40x 140 ft.; plans by Wm. F. Stone, Jr.

Mo., St. Joseph—Zion's Evangelical Church purchased site at Ninth and Faragon Sts. and plans church. Address The Pastor.

N. C., Davidson—Presbyterian Church will erect \$12,000 Sunday school annex; 35 x 50 ft.; 2 stories; J. L. Hunter, Archt., Charlotte.

N. C., Salisbury—First Presbyterian Church plans Sunday school building. Address The Pastor.

Okla., Ponca City—Christian Church plans \$100,000 building, 5th and Cleveland Sts. Address The Pastor.

Tex., Dallas—Riggs Memorial Presbyterian Church, Greenville Ave. and Oram St., Roland Martin, Chrmn. Bldg. Comm., will

erect \$15,000 building; brick veneer; capacity 300; C. D. Hill & Co., Archts. (Previously noted.)

Tex., Dallas—Ervay St. Methodist Church, Rev. Walter Armstrong, Pastor, will not crect annex as lately reported.

Tex., Denison—St., Luke's Episcopal Church Ben H. Russell, Sec., receives bids until Aug. 15 to remodel church and erect parish house with basement; plans and specifications from C. W. Bengel, Archt., 805 W. Owing St.

City and County.

Ala., Birmingham—Auditorium—City, D. E. McLendon, Prest. City Commrs., will receive competitive plans from architects until about Sept. 1 for auditorium not to exceed \$420,000 completed and furnished. (Previously noted.)

Fla., Jacksonville—Fire Station—City, Mr. Evans, Chrmn., City Comsn., will erect fire station for company 8.

statio nfor company 8; \$10,000; 30x50 ft.; interlocking tile stuccoed; tile roof; cement and wood floors; Holmes & Ehman, Archts. Address City Commrs.

Fla., West Palm Beach—Fire Stations—City, Mr. Biggers, Mayor, will erect fire station at Dixie Highway and 33rd Ave. and on lots 3 and 4, South Palm Beach Estates.

Miss., Jackson—Armory—Chamber of Commerce is considering \$60,000 bond issue for armory to be erected in connection with \$90, 000 nuditorium already authorized; auditorium to seat 5000.

Mo., Bogard—Memorial—Carroll County will erect \$25,000 memorial auditorium; 50x 70 ft.; 2 stories; concrete, tile and brick; Carey built-up roof; pine and tile floors; vapor heat, \$4000; city lights; Foster E. Scott, Archt., Carrollton; contract Aug. 12.

Mo., St. Louis—Bird House—City will erect \$140,000 bird house at Zoological Gardens; steam heat; also artificial ice plant. Address The Mayor.

Mo., Washington—City Hall—City votes Aug. 15 on \$35,000 bonds to erect city hall. Address City Commrs.

Address City Commrs.
S. C., Union—Home—J. V. Askew, County Supervisor, receives bids until Aug. 11 to erect county home; drawings and specifications from offices Mr. Askew and Harold Tatum, Archt., Columbia.

Tex., Seymour—City Hall, etc.—City votes Aug. 8 on \$40,000 bonds for city hall, \$8000 for park and \$25,000 for water works. Audress City Commrs.

Va., Richmond—Fire Station—City, Wm. M. Myers, Director of Public Safety, Room 306, City Hall, receives bids until Aug. 14 to erect fire engine house, Brookland Park Blvd, and Hawthorne Ave.; \$25,000 to \$30,000; plans and specifications from office Bldg. Inspector, Room 305; Carneal & Johnston, Archts. (Lately noted.)

W. Va., Morgantown—Jall—Monongalia County will remodel jail; \$60,000 to \$85,000. Address County Commrs.

Courthouses.

Va., Lebanon—Russell County will repair courthouse and jail; stone and brick; metal roof; concrete and hardwood floors; metal doors; steel sash and trim; electric lights; Burnett, Dixon & Burnett, Archts., Bristol.

Dwellings.

Fla., St. Petersburg—Joe F. Still will erect \$10,000 dwelling in North Shore section; casement windows on first floor; 2 baths; W. S. Shull, Archt.

Ga., Augusta—Dr. Thos. L. Davis, Hickman Rd., will erect residence, 2300 block McDowell St.

Ga., Macon-W. T. Anderson will erect dwelling in Shirley Hills; 8 rooms; stucco or brick and tile; slate or tile roof; hardwood flors; hollow fireproof tile; hot water heat, about \$1800; Curran R. Ellis, Archt. (Lately noted.)

La., New Orleans—W. B. Marston will erect residence, Fairfield and St. Vincent Aves.; \$60,000.

La., New Orleans—Victor Masson wm erect 2-story dwelling and store, Burgundy and Spain Sts.; frame; 40x60 ft.; alate and composition roof; tile theors; T. L. Perrier, Archt., Marine Bank Bldg.

La., New Orleeans—J. S. Otis will remodel dwelling, 1702 Valence St.; F. G. Churchill, Archt., Canal-Commercial Bldg.

Md., Baltimore—Wm. Flehinger, 1723 W. North Ave., will erect \$14,000 dwelling, 3402 Callaway Place; 31x60 ft.; 2 storles; frame.

Md., Baltimore—Morris Fleishman, 37 Hopkins Place, will erect 5 dwellings, Park Heights Ave. near Patapsco Ave.; \$25,000; 2 stories; brick.

Md., Baltimore—Jno. A. Rafferty will erect \$10,000 dwelling, Orkney Rd., Merrydale Little Farm; 2 stories; concrete block; H. C. Alken, Archt., 4115 Ridgewood Ave.

Md., Baltimore—Eteanor D. Barrett will erect dwelling, Seminole and Idlewild Avea, Oak Forest Park, Catonsville; 2½ stories; hollow tile and stucco; 10 rooms and 2 baths; garage; Walter A. Gieske, Archt., Gunther Bldg., Baltimore.

Md., Baltimore—Cityco Realty Co., Jno. J. Hurst, Prest., 2 E. Lexington St., will erect 4 cottages, Homeland Rd. near Clover Rd.; \$12,000; F. E. Beall, Archt., 306 St. Paul St.

Md., Baltimore—Chas. E. Litzsinger, 3678 Falls Rd., will erect 8 dwellings, E. Pleasant Place; \$15,000; 2 stories; brick.

Md., Baltimore—Henry E. Blake, 11 E. Lexington St., will erect dwelling, Chancery St. near Southway, Guilford; Wm. H. Emory, Jr., Archt., 615 Munsey Bldg.

Md., Baltimore—H. Webster Cooke, 35 Gunther Bldg., will erect 12 dwellings, 1901-23 E. 30th St.; \$50,000; 2 stories; 18x32 ft.; brick.

Md., Baltimore—Rochester Home Building Co., 3601 Old York Rd.; 20 dwellings, 601-39 E. 37th St.; 2 storles; brick; Carey roofs; furnace heat; \$45.000; Chas. W. McKewin, Archt.; owner builds.

Mo., Kansas City—Fletcher Cowherd will erect four \$3000 dwellings, 5507-09-11-15 Garfield Ave.

Mo., Kansas City—Bigham Building Co., will erect two \$8000 dwellings, 316-320 W. 51st St. terrace.

Mo., Kansas City—Connor Construction Co. will erect 3 dwellings, 1220-22 Hunting Rd. and 1221 Stratford Rd.; \$15,000 each.

Mo, Kansas City—Franklin Building Co. will erect \$10,000 dwelling, 3747 Valentine Road.

Mo., Kansas City—Joseph Guthrie will erect \$20,000 dwelling, 841 Westover Rd.; 2 stories; brick and tile.

Mo., Kansas City—W. W. Herman will erect 20 dwellings, 701-709 W. 75th St., 701 to 711 W. 75th St. terrace, and 704-06-08-10-12-14 W. 76th St.; \$2000 each.

Mo., Kansas City—Home Investment Co. will erect 5 dwellings, 6020 Walnut St., 5737-44 McGee St. and 5716-20 Oak St.; \$4000

Mo, Kansas City—H. I. Wilson will erect 4 dwellings, 7408-09-13-15 W. Prospect St; total \$18,000.

N. C., Southern Pines—Pinehurst Corp., Pinehurst, will erect number of dwellings at Knollwood Village.

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will erect dwelling and garage, 715 W. 34th St.; also dwelling 721 W. 34th St.; \$5000 each; frame.

S. C., Greenville-W. E. Beattie will repair dwelling on North St.; \$10,000.

S. C., Greer—W. L. James will erect \$10,000 dwelling, James and Emma Sts.; frame; wood shingles and the roof; pine and oak floors; 2-pipe modulation steam heat; electric wiring and fixtures; Jones & Trott, Archts., Greenville.

Tenn., Chattanooga — Charles Rosenthal will erect \$16,000 dwelling, Missionary Ridge; W. H. Sears, Archt.

Tex., Comanche—Mrs. V. H. Thodberg, P. 0, Box 225, plans to erect residence on foundation of structure lately noted burned.

Tex., Dallas—D. A. Barnett will erect \$17,-

Tex., Dallas—D. A. Barnett will erect \$17,500 dwelling, 6002 Gaston St.; 9 rooms; brick veneer.

Tex., Dallas—Mike H. Thomas will erect \$100,000 residence, Armstrong Ave, and Preston Road, Highland Park. Tex., El Paso—A. H. Goldstein will erect

Tex., El Paso—A. H. Goldstein will erect \$20,000 dwelling, Kansas and Blacker Sts.; 8 rooms; Trost & Trost, Archts.

Tex., Orange—E. W. Brown will erect \$40,000 dwelling; 47x63 ft.; hollow interlocking tile walls; Spanish tile roof; oak and marble floors; interior tile; plaster board; low pressure steam heat; electric lights; A. Babin, Archt., Beaumont; contract about Aug. 15. (Lately noted.)

W. Va., Charleston—Wm. K. Bridges purchased site on south side and plans residence.
W. Va., Huntington—Geo. I. Neal will erect \$35,000 residence, Washington Blvd. and 5th St.; 9 rooms; brick.

Government and State.

Va., Richmond—Office Building—Jas. P. Jones, Sec. Board of Bldg. Commrs., 1418 E. Main St., receives bids until Aug. 10 for foundation, including excavating, sheet filing, concrete work, etc. for \$750,000 office building on Capitol Square; 8 stories; fire-proof; plans and specifications at office Jno. T. Wilson Co., Inc., Supervising Contrs., 1226 Mutual Bldg. and office Carneal & Johnston, Archts., Chamber of Commerce Bldg., 8th and Main Sts. (Lately noted.)

Hospitals Sanitariums Etc.

Ark., Brinkley—Dr. T. J. Stout plans to rebuild hospital destroyed by fire.

Va., Harrisonburg—Jas. E. Reherd, Prest. Nat. Bank, plans \$25,000 addition to Rockingham Memorial Hospital.

Tex., Wichita Falls—Wichita County, J. P. Jones, County Judge, votes Aug. 22 on \$150,000 bonds to erect branch hospital buildings at Electra, Iowa Park and Burkburnett.

Va., Norfolk—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., will erect wing to Public Health Service Hospital, Tanner's Creek; 40x200 ft.; freproof; composition roof; metal doors; wire glass; concrete floors; ventillators; steel sash and trim; elevators \$5000; R. R. Richardson & Co., Norfolk, low bidders at \$78,900; W. G. Cornell Co., Washington, D. C., low bid for plumbing, heating and electrical work, \$25,323. Lately noted.)

Hotels.

Ala., Huntsville—T. T. Terry, A. J. Murdock and R. E. Smith will erect additional story to McGee Hotel; 75 rooms.

Fla., St. Petersburg—Mrs. C. H. Gambate will expend \$18,000 to erect additional story, enlarge dining room, etc., at Butler Arms, 145 Third Ave.

Fla., Tampa—G. D. Bridges, Wildwood, will erect 5-story hotel; brick and concrete.

Fla., Tavares—Huntley & Burleigh will enlarge Tavares Inn.

Ga., Cordele—G. Lloyd Preacher & Co, Atlanta, prepared plans for George Washington Hotel; 6 stories; 100x150 ft. (Lately noted.)

Okla., Tulsa—Mayo Hotel Co., Clarence B. Douglas, Secy., will erect \$2,000,000 hotel; 20 stories; 140x150 ft.; brick, steel and terracotta; composition roof; cement and terrazzo floors; 5 elevators; Geo. Winkler, Archt.; Mr. Michael. contr. for excavating. (Previously noted.)

S. C., Camden—Camden Land & Surf Co. will erect \$25,000 to \$40,000 hotel; 4 stories; 140x40 ft; frame; wood floors; steam heat; electric lights; LaFaye & LaFaye, Archts., Columbia. Address Ramund Krumbholz, Camden.

Miscellaneous.

Fla., Groveland — Lumber Yard—McCormick-Hannah Lumber Co., will construct lumber yard; 30x200 ft.; frame; galvanized roof; wood floors; owner builds.

Fla., West Palm Beach—Clubhouse—West Palm Beach Gun Club will erect clubhouse and concrete traphouse.

La., Alexandria—Fair—Central Louisiana Fair Assn., H. E. Bowers, Mgr., will erect several buildings.

Mo., St. Louis—Clubhouse—North Hills Country Club will erect building; \$125,000; 400 ft. wide; T. P. Barnett & Co., Archts.

N. C., Greensboro—Home—Children's Home Society, A. M. Scales, Prest., will erect cottage; cost about \$30,000.

S. C., Columbia—Fair—State Agricultural & Mechanical Society of South Carolina will creet grandstand at fair grounds; C. C. Wilson, Archt., Palmetto Bldg.; bids opened Aug. 7. (Previously noted.)

Tex., Houston—Shed—Turning Basin Compress Co.: \$21,000 cotton shed, Buffalo River; concrete floors.

Va., Richmond—Gymnasium, etc.—Herbert L. Cain prepared plans for House of Happiness; 2 stories; brick; gymnasium; bids opened Aug. 9.

Railway Stations, Sheds, Etc.

La., Ponchatoula—Illinois Central Ry. Co., F. L. Thompson, Ch. Engr., Chicago, will erect \$25,000 depot; frame and stucco.

Schools.

Ala., Glencoe—School Board will erect 2room addition and extend auditorium.

Ark., Brookings-School Board, J. D. Kerley and others, plans to erect school.

Ark., Conway-Hendrix Academy will erect building; 158x44 ft.

Ga., Cave Spring—School Trustees. J. Scott Davis, Prest., will erect \$50,000 building; 10 rooms and auditorium; hollow tile and stucco; hardwood floors; Lockwood & Poundstone, Archts., Forsyth Bldg., Atlanta, bids opened Aug. 9. (Lately noted.)

Ga., Macon—Bibb County votes Sept. 13 on \$500,000 school bonds; C. H. Bruce, Supt. of Education.

Ga., Nankipooh—School Board, Felix Jenkins and others, will erect 2-story building.

Ky., Louisville—Board of Education will erect J. M. Atherton High School for Girls on Morton Ave.; \$350,000; 3 stories; 200x 200 ft.; fireproof; composition roof over concrete; high pressure steam heat; Joseph & Joseph, Archts.; contract in about 30 days. (Lately noted.)

La., Baton Rouge—Louisiana State University and Greater Agricultural College, R. L.

Himes, Secy., Bldg. Comm., will erect classrooms, laboratories, libraries, gymnasium, dormitories, etc.; fireproof; interior and hollow tile; hardwood and concrete floors; plaster board; metal doors and ceilings; rolling partitions; steel sash and trim; wire glass; safes; vaults; ventilators; vault lights; mall chutes; Theo. C. Link, St. Louis, Supervising Archt. (Previously noted.)

La., Durald (R. D. from Eunice)—Durald Consolidated School Dist. Trustees will erect 4-room 2-story annex to building; election Aug. 12 on \$15,000 bonds.

La., Pioneer—Trustees, School Dist. No. 4, will erect building; \$20,000 bonds voted. (Lately noted.)

La., Pointe a la Hache-Plaquemines Parish School Board will erect building.

La., Shreveport—School Dist. No. 1 voted \$1,000,000 bonds to erect high school and several elementary schools. Address Caddo Parish School Board. (Lately noted.)

Md., Baltimore—St. Edward's Catholic Church, Poplar Grove and Prospect Sts., plans to erect parochial school, rectory and convent; Geo. R. Callis, Jr., Archt., American Efdg.

Md., Baltimore—School Board, Lafayette and Madison Aves., will erect 3 classrooms and 2 cloakrooms on roof of Lanvale St. side of Western High School; \$21,000.

Miss., Catchings—School Trustees, J. A. Boykin, Chrmn., Rolling Fork, will erect \$225,000 high school and teacherage; 105x 59 ft.; brick; built-up asphalt roof; pine or maple and concrete floors; vault doors; ventilators; lockers; vapor heat; Delco lights; Chas. Deas, Archt., Goodwyn Institute, Memphis, Tenn.; bids opened Aug. 7. (Lately noted.)

Mo., Holland—School Board will erect building; A. M. Van Cleave, Archt., Caruthersville, will supervise construction.

N. C., Cullowhee—Jackson County Board of Education, Sylva, will erect 2 schools; 6 rooms and auditorium and 8 rooms and auditorium; brick; bids opened Aug. 7.

N. C., Davidson—Board of Education will erect addition to High School; \$20,000; auditorium, 55x65 ft., and 4 classrooms; brick; L. L. Hunter, Archt., Charlotte.

N.C., Franklinton—School Board, G. H. Kearney, Chrmn., receives bids until Aug. 15 to remodel building; separate bids for plumbing and heating; plans and specifications at office Frank B. Simpson, Archt., Raleigh.

N. C., Gastonia—Board of Education will erect 12 or 14-room school in West Gastonia; also school in South Gastonia; \$150,000 bonds voted.

N. C., Hayesville—School Board, Allen J. Bell, Supt., receives bids until Aug. 12 to erect brick building; separate bids for plumbing and heating; plans and specifications at office Frank B. Simpson, Archt., Raleigh.

N. C., Newton—Board of Education will erect 20-room high school; \$100,000; Benton & Benton, Archts., Wilson. (Lately noted.)

N. C., Stoney Point—Board of Education will erect \$50,000 high school; L. N. Boney, Archt., Wilmington.

N. C., University—Orange County Board of Education, Hillsboro, will erect brick school; Linthieum & Linthieum, Archts., Raleigh; bids opened Aug. 7.

S. C., Charleston—The Citadel, Jno. P. Thomas, Chrmn. Bldg. Comm., 27 Cumberland St., will erect gymnasium and assembly hall; \$45,000; 90x128x50 ft.; brick and stucco, steel primary framing; Barrett specification roof; granolithic and maple floors; bids opened Aug. 7; Lockwood, Greene & Co., Engrs., Atlanta, Ga. Address R. A. Smith,

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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R. E., 163-B Moultrie St., Charleston. (Lately noted.)

S. C., Fairforest—District School Trustees, W. R. Frey, Chrmn., will erect building; 108x 117 ft.; 10 classrooms and auditorium; brick and frame; asbestos shingle roof; pine floors; vapor heat; electric lights; bids opened Aug. 5. Address S. P. Tinsley, Archt., Box 216, Spartanburg. (Lately noted.)

S. C., Greenville—County Board of Education plans school in Augusta Road Commun-

S. C., Lake City—School Dist. Trustees will erect high school; \$65,000 bonds voted.

S. C., Mullins—Mullins School Dist. No. 16 voted \$45,500 bonds to erect high school. Address Dist. School Trustees.

Tex., Clifton—Clifton College will erect administration building; \$45,000; 101x69 ft.; 3 stories; brick and concrete; built-up asphalt roof; wood floors over concrete; stone trim; hot air heat; P. G. Sliber & Co., Archts., Bedell Bldg., San Antonio; bids opened Aug. 15. (Lately noted.)

Tex., Dallas—Beta Lambda Chapter of Kappa Alpha Order, Bruce Knickerbocker, Chrmn. Bldg. Comm., will erect \$15,000 fraternity house at Southern Methodist University; 2 stories.

Tex., Dallas—Board of Education; \$10,500 school, 2416 Poplar St.; brick.

Tex., Denison—City, W. . Weaver, Mayor, voted \$50,000 bonds to improve schools. (Lately noted.)

Tex., Friona—School Board, J. C. Crawford, Secy., will erect \$50,000 high school; 20 rooms; brick and steel; composition roof; vacuum steam heat; contract about Sept. 15; E. F. Rittenberry, Archt., Amarillo. (Lately noted.)

Tex., Galveston—City, Chas. A. Keenan, Mayor, voted \$1,000,000 school bonds. (Lately noted.)

Tex., Houston—School Dist. No. 45 votes Aug. 19 on \$10,000 building bonds. Address Dist. School Trustees.

Tex., Rock Springs—School Board will erect \$16,000 addition to building; 2 storles; cut stone; Willard Simpson, Archt.

Tex., San Antonio—Bexar County School Board will erect 6-room 1-story brick building in Harlandale addition; Adams & Adams, Archts., Gibbs Bldg.; bids opened Aug. 5.

Tex., Wichita Falls—Wichita Falls Independent School Dist. Trustees W. W. Brown, Seey., 1518 12th St., will erect \$550,000 high school; 260x240 ft.; 3 stories; fire-proof; brick and tile; tar and gravel roof over concrete; steam heat; electric lights; contract about Nov. 1; Voelcker & Dixon, Wichita Falls, and Wm. B. Ittner, Board of Education Bidg., St. Louis, Asso. Archts. Address Mr. Ittner. (Previously noted.)

W. Va., Charleston—Loudon Dist. Board of Education, Quince Jones, Prest., will erect 4-room brick school, South Ruffner; bids opened Aug. 8; plans and specifications with O. Emerson Campe, Stop 2, Kanawha City, and office County Supt. of Schools, Charles-

W. Va., Guyandotte—Board of Education, J. N. Potts, Secy., receives bids until Aug. 22 to erect 2-room school, 16th St. Rd.; separate bids for brick or frame; plans and specifications at office County Supt. of Education, Huntington.

W. Va., New Martinsville—Board of Education, S. Bruce Hall, Prest., will erect grade school at Glenn Hill; 2 stories and basement; brick; F. F. Faris, Archt., Wheeling.

Stores.

Fla., Daytona-Woolworth Five and Ten

Cent Store, W. F. Yoder, Local Mgr., South Beach St., will enlarge building.

Fla., Lakeland—Rev. Smith Harding, Bradentown, will erect 2-story building; 70x82 ft.; brick and hollow tile; 3 stores on first floor; apartments above.

Fla., Melbourne—Wm. H. Kempher will erect building; 1 story; 52x80 ft.; hollow tile. Ga., Atlanta—F. G. Corker will erect addi-

Ga., Atlanta—F. G. Corker will erect addition to store at 501 Peachtree St.; \$10,000; 1 story and basement.

Ky., Louisville—Lee Lewis will expend \$12,000 to repair building at 542 S. 4th St.

Ky., Louisville-Walker & Knoon will erect \$20,000 store, 4321 W. Madison St.

La., Baton Rouge—Henry Cohn, Jr., will erect \$58,000 building, St. James and Europe St.; 2 stories; brick and concrete.

Mo., Kansas City—Tarbet & Gornall prepared plans for group of English type shops, 35th and Main Sts.; 60x148 ft.; brick and frame.

Mo., Kansas City—Equity Investment Co. will erect \$20,000 building, 1328-30 Walnut St.; 2 stories; brick.

N. C., Mount Airy—E. H. Wrenn will erect 30-ft. extension to building for Granite Mercantile Co.; 2 stories and basement.

Tex., Lufkin-B. A. Longino will erect 2story brick store.

Tex., Seguin—Blumberg Bros. Co. will erect building to replace burned structure.

Va., Lynchburg—Wall Estate will erect \$20,000 store and office building on Main St.; 3 stories: Heard & Chesterman, Archts.

Va., Virginia Beach—Henderson & Green will erect four 1-story brick stores at 17th St.; Wm. B. Randolph, Archt., Norfolk.

W. Va., Bluefield—Samuel Turk will erect 3-story brick building on Bland St.

W. Va., Clarksburg—Highland Bros. & Gore will erect \$10,000 addition to store, 128 S. Third St.

Theaters.

D. C., Washington—Cosmos Theater Co., is reported to erect \$1,500,000 theater at 13th and E Sts.; 151x141 ft.; to seat 2400; restaurant, 200 offices and 18 bowling alleys.

Fla., Fort Pierce—R. N. Kobblegard, Washington, D. C., and E. R. Minshall, Tulsa, Okla., will erect \$100,000 building; 2 stories; 140x145 ft.; reinforced concrete and tile; built-up asphalt roof; cement and wood floors; metal doors; wire glass; steel sash and trim; ventilators; 6 stores, 8 offices and theater to seat 1200. Address Jno. N. Sherwood, Archt., Fort Pierce. (Lately noted.)

Md., Baltimore — Irvington Theater Co., will erect motion picture theater, 4113-15 Frederick Ave.; \$70,000; 40x140 ft.; limestone; built-up roof; concrete floors; steam heat; seat 700; O. B. Wight, Archt., Munsey Bldg.; bids opened Aug. 7.

Tex., Dallas—Jas. J. Thomas will erect moving picture theater, Oak Lawn and Dickason Aves.

Warehouses.

Ala., Gadsden—Daniel-Murphey Coal & Storage Co. will erect warehouse.

Fla., Miami—City, F. H. Wharton, Mgr., will erect warehouse on dock; bids opened Aug.11; plans and specifications at office Chas. W. Murray, Director of Public Service.

BUILDING CONTRACTS AWARDED

Apartment Houses.

Fla., Miami Beach—Louis Shapiro; \$30,000 addition to Marevista Apts., Ocean Drive; 2 stories; cement block and stucco; 16 apartments; 2 porches; built to carry additional story; M. D. Sammons, Contr.

La., New Orleans—Francis J. A. Erlinger; \$12,000 building, Freret St. near Robertson St.; A. L. de John, Contr.

Md., Baltimore—N. J. Myerberg, 210 N. Calvert St.; \$45,000 building, St. Paul and Ware Sts.; 4 storles; 75x76.2 ft.; brick; steam heat; J. E. Moxley, Archt., 851 Equitable Bldg.; Consolidated Engineering Co. Contr., Calvert Bldg.

Association and Fraternal.

Fla., Miami—Scottish Rite Cathedral Association; \$250,000 cathedral, N. River Dr. and N. W. 3rd St.; 140x190 ft.; fireproof; tile and stone roof; cement and tile floors; hollow fireproof and interior tile; wire glass; ventilators; Kiehnel & Elliott, Archts., 245 4th Ave., Pittsburgh, Pa., and Miami, Fla.; Jno. B. Orr, Contr., Miami.

Mo., St. Louis—Harmony Lodge No. 499, A. F. & A. M.; \$50,000 building, Kingshighway and Murdock Aves.; brick; terra cotta trim; kitchen, service room, etc.; Woermann Construction Co., Contr.

W. Va., Elkins—Independent Order of Odd Fellows; \$62,000 addition, exclusive of plumbing and heating; stone, brick and concrete; tile roof; 149.6x32.2 ft.; wing 28x30 ft.; T. T. Sansbury, Archt., Parkersburg; C. T. Saffel, Contr., Elkins.

Bank and Office.

Fla., Miami-Ralston Bros. Co.; \$135,000

office building; 100x133 ft.; composition roof; wood, cork tile and ceramic tile floors; 1 elevator; August Geiger, Archt., Miami; Geo. W. Langford Co., Contr., Louisville, Ky.

Md., Baltimore—National Bank of Baltimore, T. Rowland Thomas, Prest.; \$450,000 building, St. Paul and Baltimore Sts.; 80x 102 ft.; 4 stories; granite; slate and asbestos roof; elevators, vaults, etc.; steam heat; Theo. Wells Pietch, Archt., American Bldg.; M. A. Long Co., Contr., Horn & Horn Bldg., Guilford Ave. and Fayette St.

Mo., Kansas City—Chambers Estate; 7story addition to Chambers Bldg., 12th and Manut Sts.; C. A. Smith, Archt.; Swenson Construction Co., Contr.

Mo., Kansas City—Kansas City Structural Steel Co., and Albert R. Jones; complete Athletic Club Bidg. for offices; \$1,500,000; 21 stories, including 2 floors of sleeping rooms; 100x142 ft.; steel frame; concrete interior construction; terra cotta and face brick; concrete, hardwood, tile and marble floors; hollow fireproof and interior tile; metal doors; wire glass; mail chutes; steel sash and trim; vault lights; ventilators; vacuum system heat; electric lights; 8 electric elevators; Hoit, Price & Barnes, Archts.; Swenson Construction Co., Contr.

Mo., Kansas City—Chicago Estates Co., New York Life Bldg.; \$160,000 building, 10th and Walnut Sts.; J. C. Sutherland, Archt., Interstate Bldg.; Mosby-Goodrich Construction Co., Contr., 903 New York Life Bldg. (Lately noted in detail.)

Tex., San Antonio—Jay DePuy has contract at \$25,915 to remodel building on Houston St.; C. V. Seutter, Archt.

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Va., Norfolk-United Owners Realty Co., G. Serpell, Prest., will erect 7-story annex to Law Bldg.; elevators; 45x75 ft.; Peebles & Ferguson Archts., Norfolk; H. D. Watts Co., Garrett Bldg., Baltimore, contr. at \$164,-000.

Churches.

Ala., Auburn-Protestant Episcopal Church, Rev. W. C. McDowell, Rector; \$40,000 church and parish house; Lockwood and Poundstone, Archts., Atlanta, Ga.; Algernon Blair, Contractor, Montgomery, Ala.

Ala., Birmingham-First Presbyterian Church; 2-story Sunday school addition, 4th Ave. and 21st St.; \$50,000; Warren, Knight & Davis, Archts.; Hettrick Engineering Co., Contr.

Fla., Jacksonville-Riverside Presbyterian Church; \$70,000 Sunday school building on Park St.; 90x76 ft.; fireproof; steel and brick: stone trim; capacity 1000 to 1200; Mark & Sheftall, Archts.; Ponder-Hammell Co., Contr.

Ga, Augusta-Reid Memorial Church; \$25,000 Sunday school addition; brick and hollow tile; 70x65 ft.; electric lights; tin roof; pine and hardwood floors; hot air heat; and jail; fireproof; tile roof; Edw. F. Neild, Archt., 206 Merchants Bldg.; Central Construction Co., Contr.

Fla., Miami-Church of The Holy Name; \$400,000 cathedral and rectory; 94x160 ft.; reinforced concrete and structural steel; tile roof; concrete, cork and hardwood floors; fireproof and interior tile; metal ceilings; vaults; O. J. Williams,, Archt., T. F. Hynes, Engr.; St. Johns Construction Co., Inc., Contr.

Md., Baltimore-Hampden M. P. Church; \$40,000 building, Falls Road near 36th St.; 59x130 ft.; 2 stories; brick and stone; slate roof; steam heat; John Freund, Archt., 1307 St. Paul St.; G. Walter Tovell, Contr., 403 Monument St.

N. C., Durham-Branson Methodist Church, Rev. H. C. Ewing, Pastor; \$30,000 church, Angier and Alston Aves.; 2 stories and basement; brick; auditorium to seat 450; dome; Geo. W. King, Contr., Roxboro.

N. C., Mount Airy-Second Baptist Church will erect Haymore Memorial Church on Rockford St.; \$25,000; 30 classrooms; auditorium to seat 600 to 700; contract let.

S. C., Charleston-Catholic Church; \$17,250 building; 35x70 ft.; brick; tin roof; wood floors; C. L. Whaley, Archt., Charleston; Palmer-Spivey Constr. Co., Contr., Augusta, Ga.

Tex., Fort Worth-First Baptist Church; \$50,000 Sunday school building, Throckmorton and 3rd Sts.; 4 stories; Butcher & Sweeney, Contrs.

Va., W. Wheeling-First Presbyterian Church; \$15,000 building, 1301 Chaplin St.; 33x60x36 ft.; brick; built-up roof; wood floors; hot air heat; electric lights; C. W. Bates, Archt., 77-12th St.; Ogden & Bauer, Contrs., 175-16th St.

City and County.

La., Farmerville-Jail-Union Parish Police Jury; parish jail; D. F. Kendrix, Junction City, Ark., contr., at \$9519: Pauly Jail Bldg. Co., St. Louis. Mo., steel work. \$12,000.

Va., Norfolk-Market-City; \$373,000 market building; 250x125 ft.; steel and reinforced concrete; asphalt and tar and gravel roofs; tile, composition and cement floors; hollow fireproof and interior tile; ornamen-tal terra cotta; metal doors; wire glass; steel sash and trim; electric wiring; 2 freight elevators; Benj. F. Mitchell, Archt., Seaboard Bank Bldg.; Baker & Brinkley, Contractors, Dickson Bdg.

Courthouses.

La., Shreveport-City; \$198,400 courthouse and jail; Edw. F. Neild, Archt., 206 Merchants Bidg.; Central Construction Co.,

Dwellings.

Fla., Miami Beach - Joseph Frahlinger, Schnecksville, Pa.; \$20,000 dwelling, 11th St. and Ocean Dr.; 2 stories; hollow tile; tile roof; brick wall around porch; J. Vaughan Mathis, Archt., Atlantic City, N. J.; Thos. H. Ryan, Contr., Miami.

Ga., Athens-Col. M. G. Michael; \$26,500 dwelling, Milledge Ave.; hollow tile; stud partitions; tile roof; hardwood floors; modulating heat; Hents, Reid & Adler, Archts., 921/2 N. Forsyth St., Atlanta; W. J. Miller,

La., New Orleans-Mrs. E. G. Schleider; \$60,000 dwelling, St. Charles and Palmer Aves.; J. A. Rodick, Contr.

Ga., Macon-P. T. Anderson; \$11,500 dwelling, Shirley Hills; 9 rooms; frame; Shingle roof; hardwood floors; hot water heat; \$1100; Dunwody & Oliphant, Archts.; M. E. Shaw,

La., New Orleans-R. Lockett; \$10,000 dwelling, Palmer & S. Robertson Sts.; 2 stories; Frank G. Churchill, Archt., Canar-Commercial Bldg.; Humphreys & Gertner,

La., New Orleans-R. Rougelout; \$29.000 dwelling, Napoleon Ave. and Liberty St.; 2 stories; 43x65 ft.; Burke & Dufrechou, Archts., 411 Balter Bldg.; Norman J. Reviere, Contr.

La., New Orleans-Housekeepers Building & Loan Assn.; \$10,945 duplex; 2 stories; Frank D. Mazzel, Contr.

La., New Orleans-Dr. Jno. F. Oechmer; 2 duplex dwellings, Broadway and Spruce St.; \$22,000; stucco; slate roof; pine floors; gas steam radiator heat; A. M. Pumicha., Archt.; Denis & Handy, Contrs., Canal-Commercial Bldg.

New Orleans - Marguerite Peroyea; \$10,000 duplex dwelling, Carrollton Ave. and Park Row; frame; Herbert J. Betzer, Archt., 812 N. Claiborne St.; Ashton Blum, Contr.

La., New Orleans-Mrs. Alice D. Stone; \$14,000 duplex dwelling, Calhoun and Prytania Sts.; Denis & Handy, Contrs.

La., New Orleans-Fred Gorrige; \$30,000 double dwelling, St. Ann and Alexander Sts.; J. J. Lagarde, Contr.

La., New Orleans-Jackson Homestead Association; \$12,975 duplex, Sycamore St. near Carrollton Ave.; Emile Brehm, Jr. & Wallace J. Coyle, Contrs.

La., New Orleans-Union Homestead Assn.; raised bungalow, Lowerline and Irma Sts.; \$12,500; Chris Larsen & Son, Contrs.; also \$5100 double cottage, Burgundy near Forstall Sts.; Nolan R. Allain, Contr.

Md., Baltimore-Fred W. Wilcox, 2953 Brighton St.; 2 dwellings, Devonshire Dr. near Clover Rd.; \$52,000; 11/2 stories; frame; 30x32 ft.; Geo. Wisner, Archt.-Contr.

Md., Baltimore-Harvey C. Jones, 131 Law Bldg.: 10 dwellings, Avondale and Hamlin Aves.; \$33,000; 20x30 ft.; brick; 4-ply asphalt built-up roofs; pine floors; hot water heat; electric lights; J. Allen Dieter, Archt.-Contr., 1737 Abbottston St.

Md., Baltimore-Arthur E. Reinheimer, 32 South St.; 5 bungalows, Nicholson Ave. near Emmel Ave.; \$12,000; 1 story; 26x32 ft.; frame; J. Eckstine, Archt.; Adolph Meyer, Contr., 42 Gunther Bldg.

Mo., Kansas City-Harkless & Dills Investment Co., Dwight Bldg.; three \$5000 dwell- Restaurant Co., 200 Fifth Ave., New York;

ings, 5330-34-36 Tracy Ave.; 22x44 ft.; brick, frame and stucco; shingle roofs; oak and concrete floors; hot air heat; L. N. Peters, Archt.; C. W. Lovett, Contr., 1017 E. 33rd

S. C., Camden-Hermitage Cotton Mills; number of employees' dwellings; \$60,000; Minter Homes Co., Contr., Greenville.

S. C., Clover-Hampshire Spinning Mills will erect boarding house for male employees; 20 rooms; J. W. Brison, Contr.

S. C., Gaffney-Dr. J. G. Pittman; 2-story dwelling, Limestone and Buford Sts.; hardwood floors; steam heating system in basement; Minter Homes Co., Contr., Greenville.

S. C., Gaffney-Limestone Mills; 40 employees' houses; \$54,000; Minter Homes Co., Contr., Greenville.

Tex., Houston-W. W. Moore; \$38,876 dwelling, Remington Lane, Shadyside; 2 stories; brick veneer; 2-story brick garage and laundry; Andrew Ness, Contr.

Tex., San Antonio-R. L. Strickland; \$10,-000 dwelling, Queen Anne Court; hollow tile and stucco; S. W. Ashley, Contr.

Hospitals Sanitariums Etc.

Mo., Kirksville—Grim Hospital, E. C. Grim; \$20,000 addition; Irwin Dunbar, Archt.; C. L. McKim, Contr.

N. C., Shelby-No. 6 township; \$65,000 hospital; 120x40 ft.; ordinary construction; tile roof; maple, marbleoid and tile floors; steam heat: electric lights: Louis H. Asbury. Archt., Charlotte; Lincolnton Manufacturing Co., Contr.

Va., Richmond-Dept. of Public Welfare will erect 5 buildings for Tuberculosis Sanatorium at Pine Camp; \$70,000; 30x150 ft. each; wood and brick; slate roof; wood floors; steam heat, \$15,000; electric lights; Carneal & Johnston, Archts.; Davis Bros., Inc., Contrs.

Hotels.

Ga., Macon-Bukofzer Joel Co., Atlanta; \$40,000 annex to Terminal Hotel; 3 stories; mill construction; tar and gravel roof; wood floors: W. J. Beeland, Contr., Macon.

Mo,. Kansas City-C. O. Jones, 11-story hotel, 911 Holmes St.; 42x120 ft.; reinforced concrete; asphalt roof; concrete floors; ornamental terra cotta; vapor heat; Otis elevator; Brostrom & Drotts, Archts., Reliance Bldg.; Harry Heffin, Contr.

N. C., Charlotte-Grinnell Co., New York, has contract at \$148,000 to install mechanical equipment in hotel for Citizens Hotel Co., for which J. A. Jones Constr. Co., Charlotte, has general contract at \$713,480; 14 stories; 250 rooms; Wm. L. Stoddard, Archt., 9 E. 40th St., New York.

Va., Winchester-George Washington Hotel Corp., Lewis F. Cooper, Prest.; \$250,000 hotel; 125x105 ft.; 5 stories and cellar; steel or concrete frame; brick, stone and hollow fireproof tile; concrete roof with felt and slag finish; concrete, linoleum, marble and tile floors; ornamental terra cotta; interior tile; metal doors; wire glass; steel sash and trim; ventilators; safes; vaults; 2 passenger electric elevators; Clarence L. Harding, Archt., 72\$ 15th St., Washington, D. C.; Wise Granite & Construction Co., Richmond, Va., contr., on cost plus basis.

Miscellaneous.

Ala., Mobile-St. Mary's Catholic Orphanage, Conti and Claiborne Sts.; 115x63 ft. annex; 3 stories, basement and attic; brick; G. A. Chamberlain & Co., Contrs.

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expend \$40,000 for alerations and addition to restaurant, 1340 New York Ave., N. W.; 3 stories; 22x80 ft.; brick; J. C. Westervelt, Archt., 36 W. 34th St., New York; W. P. Lipscomb Co., Contr., District National Bank Bldg., Washington.

Fla., Daytona—Casino, etc.—Speedway Casino & Amusement Co.; \$12,862 casino; 75x100 ft.; dance hall, 47x75 ft.., surrounded by restaurant and promenade; General Constr. Co., Contr.; also construct bath houses, roadway, amusement park, etc.; total \$35,000.

La., New Orleans—Chapel—Ursuline Nuns; \$132,784 chapel, Willow St, Claiborne and Nashville Aves.; Geo. J. Glover, Contr.

Mo., Kansas City—Home—Little Sisters of the Poor, Robert Gilham Rd. and 31st St.; \$300,000 Home for Aged; main building, 242-x57 ft., with wing 35x106 ft. at either end and central chapel wing 100x36 ft., power house and laundry, smoking lodge, stables, etc.; fireproof; brick; stone trim; stone base; slate roof; Hott, Price & Barnes, Archts.; Swenson Constr. Co., Contr.; McMahon Co., plumbing and heating.

Tenn., Chattanooga—Fair — Chattanooga Interstate Fair Assn.; \$31,607 grandstand at Warner Park; 220 ft. long; seating capacity 3000; concrete; steel frame; composition roof; cement floors: W. H. Sears, Archt., James Bldg.; D. F. Brandon, Contr.

W. Va., Wheeling—Clubhouse—Fort Henry Club; \$125,000 addition to clubhouse, 14th and Chapline Sts.; brick; steel girders; R. R. Kitchen Co., Contr.

Schools.

Ala., Anniston—City Board of Education re-let contract to erect Woodstock Avenue Fourth Ward grammar school to Chas. F. Duke and Harry Powell; 6 classrooms and assembly room; brick and concrete; wood floors; steam heat; Lockwood, Poundstone & Billie Arches Comparied, Natl Board, Bilde

Billie, Archts., Commercial Natl. Bank Bldg. Ala., Gadsden—Board of Education; \$17,-000 school on Etowah Ave.; 60x70 ft.; 2 stories; 8 classrooms and basement; brick; composition roof; wood floors; steam or hot air heat; A. D. Simpson, Archt; W. H. Moyers & Sons, Contrs.

Ala., Talladega—Talledega College Trustees; Seymour Hall; \$71,355; 3 stories and basement; 9.8x5.8 ft.; Gude & Co., Contrs., Atlanta. Ga.

Ark., Clarksville—College of Ozarks, Dr. H. S. Lysle, Prest.; \$79,000 administration and recitation building; 90x100 ft; brick; marble trim; Johns-Manville roof; pine floors; steam heat; electric lights; A. O. Clarke, Archt.; Orlow J. Parker, Contr., both Rogers, Ark.

La., Arcadia—Bienville Parish School Board; remodel Arcadia High School; \$12,-000; slate roof; concrete floors; J. W. Smith, Archt., Monroe; C. E. Andrews, Contr., Ruston. (See Machinery Wanted—Slate.) Mo., Jefferson City—Lincoln University Bd. of Curators, C. H. Kirchner, Prest.; \$100,000 dormitory; 148x90 ft.; reinforced concrete and brick; slate roof; hollow fireproof the; hardwood and concrete floors; metal doors; also expend \$20,000 to repair dormitorles; E. C. Jannsen, Archt., Chemical Bldg.; McDonald Constr. Co., Contr., both St. Louis.

N. C., Asheville—City, Mayor Gallatin Roberts, Chrmn., Advisory School Comm.; \$81,-950 school in South Asheville; 3 stories, brick and stone veneer; interior tile; steel beams and columns; composition tar and gravel roof; mosaic, tile, mastic, hardwood and concrete floors; hot air heat; electric lights; W. J. East, Archt.; McDowell & Roberts, Contrs., 17 Church St.

N. C. Elizabeth City—Board of Education; high school and colored graded school, N. Road St. and Body Rd. respectively; fireproof brick and stone; composition roof; wood floors; steam heat; Milburn, Heister & Co., Archts., Union Savings Bank Bldg, Washington, D. C.; L. B. Perry, Contr., Elizabeth City.

N. C., Marion—School Commrs., J. Q. Gilkey, Chrmn.; high school; 10 classrooms, recitation rooms, study hall, laboratories, library, recreation rooms, fireproof stair towers, etc.; brick; Barrett roof; oak floors; steam vacuum heat; Erle G. Stillwell, Archt., Hendersonville; McDevitt-Fleming Co., Contr., Chattanooga, Tenn.

N. C., Mebane—City Board of Education; \$75,000 school; 2 stories; brick; stone trim; auditorium to seat 1200; Herbert B. Hunter, Archt., 817 14th St., N. W., Washington, D. C., and Burlington; G. Lawson Co., Contr., Burlington.

N. C., Siler City—School Board, R. F. Paschal, Secy.; \$70,635 building; Chas. C. Wilson, Archt., Palmetto Bidg., Columbia, S. C. and Davis Bidg., Wilson, N. C.; Chatham Constr. Co., Contr., Siler City.

Okla., Stilweli—Board of Education; \$20, 000 building; 6 classrooms and auditorium; brick; steam heat; M. T. Hardin, Archt.; Joe T. Wheatt, Contr., both Muskogee.

Tex., Dallas—St. Mary's College, C. S. Dawley, Chrmn., Bldg. Comm.; 3-story dormitory; reinforced concrete and brick; stone trim; F. T. Swain and H. B. Thompson, Asso. Archts.; Geo. W. Hewitt, Contr.

Va., Bell Haven—Accomac County School Commrs., S. P. Ward, Prest.; \$40,000 building; 10 rooms and auditorium; 3 stories; brick; H. B. Pilchard, Pocomoke City, Md., contr. on percentage basis.

Va., Urbana—Christ Church School, Rev. F. E. Warren, in charge; \$40,000 dormitory; 2 stories and basement; 42x100 ft.; E. J. Rowlett, Archt., Old Dominion Trust Bldg., Richmond; E. S. Muire, Contr., Urbana.

W. Va., Cabin Creek-Bd. of Education;

\$94,000 school at Love's Block; 6 rooms; brick; Haddock & Co., Contrs., Charleston.

Stores.

Ala., Andalusia—A. C. Darling; \$10,000; store and wareroom on S. Cotton St.; 2 stories; 50x125 ft.; brick; Johns-Manville bullt-up roof; wood or concrete floors; Andalusia Mfg. Co., Contr.

Fla., Miami Beach—N. B. T. Roney; \$20,000 store and hotel, 5th St. and Collins Ave.; 50x150 ft.; cement block; concrete beams and columns; Robt. A. Taylor, Archt., Miami; D. R. Adams & Co., Contrs.

Fla., St. Petersburg—Jack Taylor; building at Fifth St. and First Ave.; Franklin J. Mason, Contr.

La., New Orleans—W. R. Irby Co.; \$11,-927 to repair building, 518-20 Royal St.; L. F. Favret, Contr.

La., New Orleans—Harry Rosenberg; \$17,-900 store, Tulane and Palmyra Sts.; Jno. Lugenbuhl, Contr.

Md., Pocomoke City—T. F. Hargis Co., \$135,000 department store; 50x220 ft.; 3 stories; brick and steel; Owens & Sisco, Archts., Continental Bldg.; Northeastern Constr. Co., Contr., Lexington Bldg., both Baltimore.

N. C., Wilson—Daley Tobacco Co.; \$20,000 store on Spring St.; 2 stories; 77x72 ft.; Wilkins Bros., Contrs.

S. C., Blacksburg-J. V. Phillips; brick building on Main St.; Mr. Kizer, Contr.

Tenn., Chattanooga—Fox Bros. Co.; \$24,000 store, King St. and Railroad Ave.; 3 stories; 62x132 ft.; brick and concrete; W. H. Sears, Archt.; A. F. Hahn, Contr.

Tex., Brady—J. E. Bell and E. L. Ogden; 3 fireproof stores; brick; tin roof; concrete floors; C. R. Horn, Contr.

Theaters.

Mo., Kansas City—Butler Estate, Forest P. Tralles, Representative; expend \$110,000 to rebuild interior of Century Theater, 12th and Central Sts.; McCallum Constr. Co., Contr.

Warehouses.

Fla., Ocala—Lewis-Chitty Consolidated Grocery Co.; warehouse on Ocklawaha Avc. and Washington St.; brick; Ray & Thompson, Contrs.

Ky., Louisville—Hillerick & Bradsby Co.; \$11,000 warehouse; 46x112 ft.; brick and steel; 3-ply roll roof; maple floors; Sanders & Weinedel, Archt., Lincoln Bank Bldg.; L. W. Hancock, Contr.

Md., Baltimore—Southern Supply Co., Edw. A. Marshall, Prest., Saratoga and Calvert Sts.; alterations to warehouse, 310-12 Guilford Ave.; \$10,000; F. J. Groves, Contr., 414 St. Paul St.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Are and Incandescent Lights.—Board of Public Service, Room 208, City Hall, St. Louis, Mo.—Bids until Aug. 15 to furnish, install, maintain and operate electric are and incandescent lights, gas lights and gas mantle lamps on certain streets; plans with Director of Public Utilities, Room 308, City Hall.

Ash and Garbage Can Tops.—Fidelity Can Co., 610 S. Caroline St., Baltimore, Md.—To purchase galvanized tops for ash and garbage cans.

Barrels.-W. A. Vickers, Mgr., Southern Soap Co., Box 602, Shreveport, La.-To purchase barrels suitable for packing soap powders; specifications upon application.

Boiler.—Reding Gold Mining Co., E. L. Walton, Prest., Danville, Va.—Prices on boiler for gold mining mchy.

Boilers.—White Oak Corp. (Mchy. Dealers) Knoxville, Tenn.—Prices on one battery of two 72x18 or 66x18 high pressure H. R. T. boilers, complete with all fittings, good condition; also one single 150 H. P. boiler high pressure and complete with all fittings; boiler must stand inspection and insurable for 125 lbs. working pressure.

Boilers. - Duncan Machinery Co., (Mchy.

Dealers) 721 N. Central Ave., Dempster Bidg., Knoxville, Tenn.—Prices on 150, 200 and 150 H. P. return tubular, or any other first-class bollers; used; insurable for 100,125 and 150 lbs. working pressure; delivery nearest shipping point to Middlesboro and Pineville, Ky.

Bulkhead.—A. Rosen, Chrmn. of Bulkhead Committee, Kissimmee, Fla.—Invite bids for filling of lake front; 300,000 cu yds.

Bridge Construction. — O. F. Holcombe, Mayor, Houston, Tex.—Bids until Sept. 5 for bridge across Buffalo Bayou at Sabine St.; plans, etc., from J. C. McVea, City Engr.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Retord is mentioned.

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Bridge Construction .- Duval County Commrs., Frank Brown, Clerk, Jacksonville, Fla. Bids until Aug. 10, for following creosoted wood bridges:

Over Newcastle Creek on Gilmore road. Over South Pablo Slough on Second Street Extension; plans, etc., on file.

Bridge Construction.-North Carolina Stare Highway Comsn., Raleigh, N. C .- Bids until Aug. 30 for following projects: 848—McDowell County, over Mills Creek

and Southern Railway.

858-Mitchell County, bridge near Spruce

317-Over Town Creek in Brunswick Coun-

Bridge Construction .- State Highway Department, Jefferson City, Mo.-Bids until Aug. 14 for following:

Scott County, Federal Aid Project No. 5, on State road from Sikeston eastward and westward.

Station 11 plus 00, over Drainage Ditch No. 1; 50-ft. I-Beam span; creosoted wood floor; 18-ft. roadway; 2 mass concrete abutments.

Station 26 plus 40, over Ash Slough Drainage Ditch; 40-ft. I-Beam span; creosoted wood floor; 18-ft. roadway; 2 mass concrete abutments.

Station 266 plus 30, over St. Johns Drainage Ditch; 70-ft. steel truss span; creosoted wood floor; 18-ft. roadway; 2 mass concrete shutments, skewed.

Station 401, over North Cut Drainage Ditch; 85-ft. steel truss span; creosoted wood floor; 18-ft. roadway; 2 mass concrete abutments,

Dallas County, State Aid Project No. 20, 183; on State road from Springfield to Sedalla, Springfield to Jefferson City and Bolivar to Buffalo.

Station 178 plus 35; 30-ft. reinforced concrete deck girder span; 18-ft. roadway; 2 mass concrete abutments.

Station 203 plus 65; 20-ft. reinforced concrete slab span; 18-ft. roadway; 2 reinforced concrete abutments.

Bridge Construction.-State Comsn., Richmond, Va.-Bids until Aug. 18 for following projects:

8-225, Route 1, over Rappahannock River, at Falmouth, between Spotsylvania and Stafford Counties; 1019 ft. 101/2 -in. long; 18-ft. roadway; 781,200 lbs. structural steel; 17,-820 lbs. re-inforcing steel; 843 cu. yds. concrete; alternate bids on 144,400 lbs. structural steel; 272 cu. yds. concrete.

8-249, Route 1, over Swift Creek, Chester-field County; 78 ft. long; reinforced concrete; 240 cu. yds. concrete; 20,000 lbs. reinforcing steel.

8-250, Route 1, over Spring Branch, Pulaski County; 47 ft. long; reinforced concrete; 160 cu. yds. concrete; 4130 lbs. steel; plans, etc. on file, from Dist. Engrs., Fredericksburg, Va., for Project S-225, and at Roanoke, Va., for Project 8-250.

Bridge Construction .- Hinds County, Board of Supvrs., W. S. Wells, Clk., Jackson, Miss. -Bids opened Aug. 7 for wooden bridge on new Champion Hill road, in Second Supvrs.' Dist.; also floor bridge near Smith Station; plans, etc. on file.

Building Material.-R. B. Mason, 308 W. Madison St., Baltimore, Md., is estimating on erection of buildings for Baltimore Hospital for Communicable Diseases and desires sub-bids and estimates until Aug. 13.

Candy Machinery.-Desert Candy Co., 508 San Francisco St., El Paso, Tex.-Data and prices on candy factory mchy; correspondence with mfrs.

Canning Machinery .- Dunn Wheat Co., John R. Cain, 602 N. Broadway, Lexington, Ky .- Prices on complete canning machinery. and nickel plating shock absorbers.

Cars (Mine) .- G. W. Fish. Prest., Alton Lumber Co., Buckhannon, W. Va.-Several 2 ton, 36-in. gauge coal mine cars, shipment to Alton, W. Va.

Cartons.-W. A. Vickers, Mgr., Southern Soap Co., Box 602, Shreveport, La.-To purchase paper cartons, paper shipping boxes: specifications furnished on application.

Cigarette Case .- C. D. Ehrman, 300 Harrison St., Lynchburg. Va.—To contract for mfre. of cigarette case, to be made of metal covered with leather.

Cold Storage Plant .- Thomas M. H. Zuber, Daytona, Fla.-4-ton capacity cold storage plant.

Combination Saw .- Wilson-Hock Co., City Point, Va.-Combination saw, gas engine driven, portable.

Cones (Ice Cream) .- S. Frank Perkins, 711 Pine St., Bradentown, Fla.-Mchy. for mfre. of high grade ice cream cones, correspond with mfrs.

Creosoted Lumber.-C. A. Wood Preserver Co., Arcade Bldg., St. Louis, Mo .- To correspond with lumber mfrs, interested in creosoted lumber.

Cross Ties .- C. A. Wood Preserver Co., Arcade Bldg., St. Louis, Mo .- Prices on cross

Culvert and Bridge Construction.-Mariboro County Highways Commrs., J. C. Covington, Chrmn., Bennettsville, S. C.—Bids until Aug. 15 for following:

Section A-6 reinforced concrete box culverts; 445.9 cu. yds. concrete; 38,258 lbs. reinforcing steel.

Section B-4 reinforced concrete bridges; 605.54 cu. yds. concrete; 74,080 lbs. rem. steel; plans, etc., from B. M. English, County Engr.

Culvert Construction. - Muscogee County Commrs., J. B. Key, Chrmn., Columbus, Ga. -Bids opened Aug. 5 for reinforced concrete culvert and necessary approaches on Weracoba Creek, at 12th St., and Monroe Road; plans, etc., from Ordinary's office.

Drainage. - Scott County Drainage Dist No. 15, Geo. W. Pearman, Clk., Benton, Mo. -Bids until Aug. 14 to construct about 209,-300 cu. yds. of earth excavation from existing ditch and to dig new ditches; drag line or floating dredge work; plans with C. E. Swank, Engr., Charleston, Mo.

Dredging.—U. S. Engr. Office, 616 Army Bldg., New York City—Bids until Aug. 19 for dredging in Passaic River, N. J.; information on application.

Dredging .- U. S. Engr. Office, Norfolk, Va. -Bids until Aug. 23 to dredge 40-ft. channel, Norfolk Harbor; information on application.

Dry Colors .- W. Oscar Orr, Box 72, Langdale, Ala.-Dry colors for special concrete

Drill Presses, Etc .- P. A. Leckrone, Secy., Crown Shock Absorber Co., 517 West Building, Houston, Tex.—Bids open for drill presses, vises, etc.

Earthworks .- Mississippi River Comsn., 1st and 2nd Districts, Custom House, Memphis, Tenn.-Bids until Aug. 14 to construct 4,000,000 cu. yds. of earthworks in upper and lower St. Francis and White River Levee District: information on application.

Electrical Equipment .- John L. Livers, Prest., Charlottesville & Albermarle Railway Co., Charlottesville, Va.-Invite bids on 1500 K. W. horizontal, 2300 volt steam turbine with condenser and switch-board equipment.

Enameling and Nickel Plating Equipment. P. A. Leckrone, Secy., Crown Shock Absorber Co., 517 West Building, Houston, Tex. -Bids open for equipment for enameling

Engine-Thomas M. H. Zuber, Daytona, Fla.-Engine for 4-ton capacity cold storage

Engine .- Duncan Machinery Co., (Mchy. Dealers) Dempster Bldg., 721 Central Ave., Knoxville, Tenn.-Jobbers prices on 150 H. P. throttling or slide valve used engine, state location; good condition.

Engine .- Reding Gold Mining Co., E. L. Walton, Prest., Danville, Va.-Prices on engine, for gold mining.

Engine (Hoisting) .- A. P. Gilbert, Durham, N. C .- To purchase double cylinder, double drop hoisting engine, about 8x10 cylinder; good condition.

Excavation .- U. S. Engr. Office, Wilmington, Del-Bids until Aug. 15 for excavating Inland waterways from Delaware River to Chesapeake Bay (Chesapeake and Delaware Canal); information on application.

Fire Hose.-Board of Alderman of City of Opelousas, La.-Bids opened Aug. 8 to furnish 1000 ft. of rubber lined 3-ply, 21/2-in. cotton hose in 50-ft. sections, with Anderson couplings complete.

Glass Machinery .- Atlanta Glass Mfg. Co., Box 439, Atlanta, Ga. Prices and catalogs on mchy, for mfre, of bottles and window

Gold Mining Machinery .- Reding Gold Mining Co., E. L. Walton, Prest., Danville, Va. -Prices on gold mining mchy.

Heating, etc.-Board of Education of Gates County, J. M. Glenn, Secy., Gatesville, N. C. —Bids open Aug. 7, for heating, lighting and plumbing for school building at Hobbsville. N. C.: information on application.

Holsting Outfit .- Wilson-Hock Co., City Pt. Va.-Single drum hoisting outfit, complete with boiler, suitable for hoisting material three stories

Incandescent Lamps.—City Comsn., W. A. Evans, Chrmn., Jacksonville, Fla.—Bids until Aug. 24 to supply quantity of lamps to electric light dept.; lamps to be one hundred 120 volt multiple type and eighty 1000 candle power street series, 4 ampere, type B rectiple and series; f. o. b. city store room, tiple and series; f. o. b. City Store room, Jacksonville; further information apply R. N. Ellis, Purchasing Agent.

Incinerator .- Board of Awards, Richard Gwinn, City Register, Baltimore, Md.-Bias until Aug. 16 for incinerator at Bay View Asylum; plans with J. F. Crowther, Inspector of Bldgs.

Industrial Plants .- John B. Yates, Prest., Board of Trade, City of Pennsboro, W. Va. -Interested in industrial plants using quantities of natural gas to locate in W. Va.

Intake Pier, etc.--City, C. H. Dowler, Mgr., Wheeling, W. Va.—Bids until Aug. 17 to constrfuct intake pier, 48-in. intake line, traveling screens with building, 17,000 ft. of 30-in. steel force mains and 3000 ft. of 36-in. steel reservoir mains, five 1,000,000 steel storage tanks; information on application.

Irrigating Plant .- J. F. Briggs, Lynn Haven, Fla.-Prices on irrigating plant for small grove and other purposes on place of several acres.

Lathe.-Duncan Machinery Co. (Machinery Dealers), 721 N. Central Ave., Dempster Bldg., Knoxville, Tenn.—Prices on 12-in. swing by 6 ft. between centers, belt driven lathe, equipped with hand feed and compound rest; first-class used machine.

Laundry Equipment.—Board of Awards,

Richard Gwinn, City Register, Baltimore, Md .- Bids until Aug. 16 for laundry equipment at Bay View Asylum; plans with J. F. Crowther, Inspector of Bldgs.

Levee .- Third Mississippi River District, Box 404, Vicksburg, Miss.-Bids until Aug.

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12 to construct 575,000 cu. yds. new levee; information on application.

Levee Construction .- Lower Yazoo Levee District Commissioners, Greenville, Miss.— Bids until Aug. 17 to construct about 4.005,000 cu. yds. of levee work in Lower Yazoo River District on east bank Louisiana section of Upper Tensas Levee Dist.; Major R. P. Howell, U. S. Army Engr., in charge, Vicksburg, Miss.

Limestone.-Sibert & Robinson, Augusta, Ga.-Buff color Indiana limestone.

-State Highway Comsn., Frank-Limestone. fort, Ky.-Bids until Aug. 15 to deliver 5000 tons crushed limestone in bins or cars; f. o. b. Newport, Ky.; Joe S. Boggs, State Highway Engr., Old Capitol Bldg., Frankfort. Kv.

Locomotive.-W. H. Bradley, 219 Grant Bldg., Atlanta, Ga.-10 to 20 ton narrow gauge saddle tank locomotive.

Lumber .- Okolona Home Building Co., Okolona, R. Sta. Louisville, Ky.-Later may be interested in lumber in car load lots.

Lumber (Creosoted) .- Port Commrs., Suite 200 New Orleans Court Bldg., New Orleans. -Bids opened Aug. 10 to furnish 506,000 ft. of creosoted lumber and timber in various dimensions for sacking plant at grain elevator, Robin St. shed; plans at office of Supervisor of Purchasers, 1 Canal St.

Mercury. - J. Hod Williams, Maddock Bldg., West Palm Beach, Fla.-To purchase mercury in quantity.

Mixer (Concrete) etc.-Wilson-Hock Co., City Point, Va .- Concrete mixer 1/4 to 1-vd. capacity, gas engine driven; also 12 barrows.

Molds (Sectional) .- W. Oscar Orr., Box 72, Langdale, Ala.—To purchase sectional molds for concrete flower pots, jardinieres, urns, relief figures, garden furniture, etc.

Painting .- Board of Awards, Richard Gwinn, City Register, Baltimore, Md.-Bids until Aug. 16 for interior and exterior painting of schools Nos. 1, 20, 24, 40, 67, 93, 94, 105, 106 branch, 110, 113, and 118; plans with J. F. Crowther, Inspector of Bldgs.

Paving .- W. B. Strachan, Mayor, Salisbury, N. C .- Bids until Aug. 14 to pave streets in Dists. 35 to 37, inclusive; loss sq. yds. bitulithic, sheet asphalt or Topeka paving on 5-in. concrete base, on concrete paving 7-in. thick; 13,135 lin. ft. granite curb; 2960 sq. yds. concrete gutter; 12,100 lin. it. combined concrete curb and gutter; plans, etc., from J. W. Webb, City Engr.

Paving .- City, Board of Public Service, St. Louis, Mo.-Bids until Aug. 15 to improve Watson road from Southwest to Penrod Aves.; plans, etc., on file.

Paving.-City Clk., Wellington, Tex.-Bids until Aug. 15 for 10,500 sq. yds. concrete brick, vibrolithic or bitulithic paving; plans, etc. on file, or from Mackintosh Co., Engr., Oklahoma City, Okla.

Paving .- City, Board of Awards, Wm. F. Broening, Prest., Baltimore, Md.-Bids until Aug. 16 for following contracts:

No. 222-NA-13,780 sq. yds. sheet asphalt; No. 223-OC-1805 sq. yds. cement concrete; No. 224-NA-1880 sq. yds. cement concrete; plans, etc., from Paving Comsn., R. Keith Compton, Chrmn.

Also grade and pave footways in Conts. Nos. 36 and 37; cement concrete; plans, etc. on file; A. E. Christhilf, Highway Engr.

Paving.-J. B. Wright, Mayor, Trenton, Mo.-Bids opened Aug. 10 to pave parts of 3 streets with bituminous macadam; \$15,000; H. C. Gish, Engr.

Piles (Creosoting) .- Port Commrs., Suite 200, New Orleans Court Bldg., New Orleans, La.-Bids opened Aug. 10 to furnish approx.

958 creosoted piles, various lengths, for sacking plant at grain elevator, 7th St. wharf; plans at office of Supervisor of Purchasers,

Pipe, etc.-J. E. Briggs, Lynn Haven, Fla. -Prices on pipe and other supplies for an artesian well several hundred feet deep.

Pipe (Smoking) .- Mchy. J. B. Glover, Jr., Box 98, Statesville, N. C .- Prices on mchy. for mfre, of smoking pipes; correspond with

Plow Handle Machinery.-J. D. Blackard Stave & Cooperage Co., Inc., Stuart, Va. To purchase second-hand set of plow handle machinery.

Pop Corn Machinery .- S. Frank Perkins, 711 Pine St., Bradentown, Fla.-Mchy. for mfre. of pop corn fritters, correspond with

Post Hole Digger .- D. J. Marleau Co., Toledo, Ohio .- Automatic post hole digger run by gasoline engine; space for digger and engine to occupy not over 2 ft. wide and 6 ft. long.

Pressure Tank .-- Alex M. Robinson, Georgetown, Ky.-Dealers prices on first-class pressure tank capacity from 500 to 600 gal., to stand not less than 75 lbs. pressure.

Pumping Station Equipment.-U. S. Reclamation Service, Dept. of Interior, Washington, D. C .- Bids until Sept. 6 to furnish motors, transformers and switching apparatus for Valley Drainage Pumping plant. Yuma Project, Arizona; plans on file or at Denver, Colo., or at Yuma, Ariz.

Refrigeration Plant .- U. S. Dept. of Agriculture, Washington, D. C.—Bids until Aug. 18 for construction of masonry bldg, for refrigeration plant; information on appli-

Rip Rap, etc.-Mississippi River Comsn., 1st and 2nd Dists., Custom House, Memphis, Tenn.-Bids opened Aug. 10 for furnishing and loading 12,000 cu. yds. rip rap stone on Gov't barges: information on application,

Road Construction .- Camp County, J. A. Elfrud, County Judge, Pittsburgh, Tex.— Bids until Aug. 14 for 16.16 mi, bituminous macadam road on State Highway No. 1-A; plans, etc., from Chas. C. Chappell, County Engr., or State Highway Dept., Austin, Tex.

County Road Construction .- Harrison Court, Clair N. Parrish, Clk., Clarksburg, W. Va.-Bids until Aug. 15 to grade and surface 3200 ft. from end of brick pavement at Weirton Steel Mill through Despard; plans, etc. from County Road Engr., Clarks-

Road Construction .- Newton County Commrs. Court, J. E. Rausch, County Judge, Newton, Tex.—Bids until Aug. 14 to gravel surface 16 mi. State Highway No. 8-A; construct drainage structures; plans, etc. from Walter T. Bolton, County Engr.

Road Construction .- Bexar County Commrs., Court, San Antonio, Tex.-Bids opened Aug. 7 for 8.38 mi. State Highway No. 2, Pearsall road; 17,959.4 cu. yds. gravel, furnished by County; 79,301 sq. yds. rock asphalt topping; 108,648 lbs. rein. steel; plans, etc., from W. S. Kendall, County Auditro; Augustus McCloskey, County Judge; R. E. Killmer, County Engr.

Road Construction .- Sutton County, J. W. Elliott, County Judge, Sonora, Tex.-Bids until Aug. 10 for 9.66 mi. State Highway No. 4; 30,774 cn. yds. gravel surfacing; furnished by County; 71,338 lbs. rein. steel; J. W. Alger, County, Engr.

Road Construction. - Fairfield County Highway Comsn., 11th Township, B. H. Yarborough, Chrmn., Jenkinsville, S. C.—Bids opened Aug. 7 for following:

3 mi. road from Alston to Jenkinsville; 5518.2 cu. yds. top soil surfacing; 4251 lbs. steel reinforcement.

4.147 mi. Monticello road from Little River to Jenkinsville; 7006 cu. yds. top soil surfacing; 3441.2 lbs. steel reinforcement; plans, etc., from J. H. Moore, Engr., 31 Arcade Bldg., Columbia, S. C.

Road Construction. - State Road Comsn. 601 Garrett Bldg., Baltimore, Md.-Bids until Aug. 15 for following concrete roads: Garrett County, 2 mi. State Highway from

Gortner toward Red House; Cont. G-22.

Frederick County, 2.03 ml. State Highway from Middleton toward Myersville; Cont.

Montgomery County, 1 mi. State Highway along Flower Ave. from Carroll Ave. to Bel Air road: Cont. M-36.

Hartford County, 2 mi. State Highway along Philadelphia road from Aberdeen toward Baltimore County line; Cont. H-28. Somerset County, 1.5 mi. State Highway from Marion toward Tulls Corner; Cont. 8-16

Worcester County, 1.8 mi. State Highway from Columbia Pike near Ellicott City, Howard County, 1.5 mi. State Highway from Columbia Pike near Elicott toward Pfeiffers Corner; Contr. HO-25.

Road Construction .- Pickens County Commrs., B. G. Robison, County Judge, Carrollton, Ala.-Bids until Aug. 14 for 11 mi. road in County; plans, etc., on file, or from Southern Engineering Co, Civil Engrs., Clarksdate,

Road Construction.-North Carolina State Highway Comsn., Raleigh, N. C.-Bids until Aug. 30 for following projects:

106—Bertie County, 7.12 mi. soil road from Windsor to Roanoke River Bridge.

107-Bertie County, 19.3 mi. soil road from Windsor to Aulander.

157-Martin County, 24 mi. soil road from Williamston to Edgecombe County line, via Hamilton, route No. 125.

185-Pitt County, 7.14 ml. hard surface road from Ayden to Lenoir County line. 328-Columbus County, 7.03 mi. hard surface from Whiteville to Chadbourn.

412-Durham County, 8.70 mi. hard surface road from Person County line to end pavement north of Durham.

460-Orange County, 9.87 mi. hard surface road from Hillsboro to Mebane.

589-Rockingham County, 8 mi. hard surface road from Wentworth to Leakville.

590-Rockingham County, 2.10 mi, penetration macadam road from Madison to May-

528—Davidson County, 12 mi. hard surface road from Thomasville to Lexington.

608-Anson County, 7.88 ml. har dsurface road from Wadesboro to Polkton.

658-Mecklenburg County, 9.55 mi. hard surface road from Charlotte to Cabarrus County line.

615-Cabarrus County, 3.88 mi. hard surface road from Concord to Glass.

761-Surry County, 2 mi. hard surface road road Mt. Airy to Granite Quarry.

765-Surry County, hard surface road from Yadkin River to Dodson Road, through El-

784-Wilkes County, 5.3 mi. soil road from Moravian Falls to Kilby Gap.

785-Wilkes County, 2 mi. hard surface road from N. Wilkesboro to Fair Plains. 847-McDowell County, 3.8. mi. soil road from Ashford to Avery County line.

822-Cleveland County, 10.47 mi. hard surface road from Shelby to Kings Mountain. 849A-McDowell County, 8 mi. soil rd. from

Mitchell County line, route No. 19, to junction road No. 194 near Woodlawn. 876—Rutherford County, 6.40 mi. hard surface road from Forest City to Rutherfordton. il

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882-Rutherford County, 15.90 ml. soil road from Forest City to South Carolina line via Cliffside.

712-Ashe County, 11.06 mi, soil road from Jefferson to Allegheny County line.

901—Buncombe County, 7.57 mi. hard surface road from Mine Hole Gap to Henderson County line.

941—Haywood County, 7.30 mi. soil road from Springdale to Transylvania County line.

Road Construction.—Board of Comma. Pulaski Road Improvement Dist. No. 10, H. g. Turner, Secy., Little Rock, Ark.—Bids until Aug. 30 for 40 mi. roads and streets; plans, etc. from D. A. McCrea, Ch. Engr., Gazette Bidg., Little Rock.

Road Construction.—Treasury Dept., Jas. A. Wetmore, Acting Supvg. Archt., Washington, D. C.—Bids until Aug. 24 to lay roads and walks at U. S. Public Health Service Hospital No. 62, Augusta, Ga.; plans, etc., on file or from J. M. Geary, Supt. of Construction. Hospital, Augusta.

Road Construction.—Treasury Dept., Jas. A. Wetmore, Acting Supyg. Archt., Washington, D. C.—Bids until Aug. 17 for 3.6 mi. concrete road at United States Veterans' Hospital, Tuskegee, Ala.; grade and construct drainage structures; plans, etc., from Supt. of Roads, Tuskegee, Ala.

Read Construction.—State Highway Comsn., Frankford, Ky.—Bids until Aug. 15 to surface 7.7 mi. Catlettsburg-Louisa road from Peterman Creek Sta. 0 plus 00 to Laurel Creek Sta.; 409 plus 37; Boyd County, State Project No. 6, Sec. B; waterbound slag, macadam or waterbound slag macadam surface treated, or bituminous slag macadam penetration type; on sandstone base; grade and construct drainage structures; plans, etc. from State Highway Engr., Frankford, Ky.

Road Construction.—Charles City County, Board of Supvrs., R. S. Major, Clk., Charles City, Va.—Bids until Aug. 15 for following: 4.33 mi. gravel road from Mt. Pleasant to Henrico County line;

7.21 ml. gravel road on River road from forks of road near Charles City Courthouse, to forks of road at Grave's Shop, via Marable's Store; construct drainage structures on both; plans, etc., on file.

Read Construction.—Brunswick County Commrs., W. H. Walker, Clk., Southport, N. C.—Bids opened Aug. 7 for 2½ mi. sand clay road; plans, etc. on file.

Road Construction.—Chatham County Commrs., G. Reuben Butler, Clk., Savannah, Ga.—Bids until Aug. 22, to lay road to Tybee, between Stations 409 to 436, from Stations 62 to 679; plans, etc. on file, and from County Engr.

Read Construction.—State Highway Comem., Frankfort, Ky.—Bids until Aug. 15 for laying bituminous surface treatment on following:

Franklin County, improve 4 mi. Frankfort-Georgetown road from Forks of Elkhorn to Scott County line; 10,000 gals. medium oil or tar; 320 tons stone chips or pea graver; State Project No. 17, Section F.

Hardin County, improve 1.55 mi. Dixle Righway from city limits of West Point to Camp Knox Reservation; 5000 gals. medium oll or tar; 145 tons stone chips; State Project No. 8, Section B.

Bath County, 3.2 mi. Sharpsburg-Owingsville road from Sharpsburg Sta. 401 to Sta. 571; 8000 gals. medium oil or tar; 260 tons stone chips or pea gravel; State Project No. 61, Section B.

Boyle County, 8.38 mi. Danville-Perryville and Danville-Stanford roads from city limits of Danville to Salt River and Lincoln County line; 20,000 gals. medium oil or tar; 580 tons stone chips or pea gravel; State Projects Nos. 25 and 22, Sectons C and C-I.

Hart County, 1. 8 m. Jackson Highway from Sand Hollow to Pikeview; 5000 gals. medium oil or tar; 150 tons stone chips or pea gravel; State Project No. 3. Section 4.

Larue County, 6.33 mi. Jackson Highway from Buffalo to Hart County line; 18,000 gals. medium oll or tar; 500 tons stone chips or pea gravel; State Project No. 3 Section F.

Clark County, 1404 mi. Oinchester-Richmond and Winchester-Paris roads, from city limits of Winchester to Madison and Bourbon Counties lines; 28,000 gals. medium oil or tar; 850 tons stone chips or pea gravel; State Project No. 50, Section B.

Madison County, 4.68 mi. Richmond-Beree road from Fort Estill to Kingston; 9000 gals. medium oil or tar; 300 tons stone chips or pea gravel; State Proj. No. 5, Section K.

Warren County, 2.8 mi. Bowling Green-Scottsville road from City limits of Bowling Green to Greenwood; 5920 tons stone; State Project No. 37, Section A.

Woodford County, 10.5 ml. Versailles-Harrodsburg road, from Station 211 to Station 765; 20,000 gals. medium oil or tar; 650 tons stone chips or pea gravel; State Project No. 26. Section B.

Campbell County, repair 12 ml. Newport-Independence road from city limits of New port to Independence; 5000 tons crushed limestone; State Project No. 21, Section A.; plans, etc., from Joe S. Boggs, State Highway Engr., Old Capitol Bldg., Frankfort.

Rock.—City Comsn., W. A. Evans, Chrmn., Jacksonville, Fla.—Bids until Aug. 17 to furnish 10 cars Ocala lime rock, crushed that passed 3½-in. laboratory screen, free from foreign matter; prices f. o. b. cars Jacksonville.

Rock Removal.—U. S. Engr. Office, Providence, R. I.—Bids until Aug. 15 for rock removal in Stamford Harbor, Conn.; information on application.

Rosettes (Sprinkler Cans).—Fidelity Can Co., 610 S. Caroline St., Baltimore, Md.—To purchase rosettes for sprinkling cans.

Sand and Gravel.—U. S. Engineer's Office, 329 Custom House, New Orleans, La.—Bids until Sept. 1 to furnish sand and gravel for Southwest Pass, Mississippi River; information on application.

Screens.—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C. —Bids until Aug. 23 to remodel screen in post office, Fairmont, W. Va.; drawing No. 29-A and specification from Custodian at site or office Supervising Archt.

Seating.—L. A. Martin, Bowling Green, Va.
—Pews for church; to correspond with mfrs.
in Southern territory.

Shear.—Wilson-Hock Co., City Point, Va.— Alligator type belt driven shear, to cut 50 to 100 metal ties at a time; each tie 1/16x-1½; used equipment.

Sewer Construction.—Board of Awards, Richard Gwinn, City Register, Baltimore, Md.—Bids until Aug. 16 to construct water drains in Dist. 6-11, contract No. 54, consisting of: 680-ft. lin. ft. of 20-in. vitrified pipe drain, 1422 ft. of 24, 33 and 36-in. reinforced concrete pipe drain, 2500 ft. lin. ft. rectangular reinforced concrete dram, to manholes, etc.; specifications with A. E. Christhilf, Highways Engr.

Sewer Construction. — District Commrs., Cuno H. Rudolph, Room 427 District Bldg., Washington, D. C.—Bids opened Aug. 8 to construct about 2700 ft. of sewer; information on application.

Shovel (Steam).—H. J. Moore, Sweetwater, Tenn.—Small revolving steam shovel on traction wheels. Slate.—C. E. Andrews, Ruston, La.—45 squares Johnson's unfading green state, f. o. b. Arcadia, La.

Spurdike Construction.—U. S. Engr. Office, 329 Customhouse, New Orleans, La.—Bids until Sept. 5 for construction of spurdikes at head of passes, Mississippi river; information on application.

Steam Kettles, etc.—Desert Candy Co., 508 San Francisco St., El Paso, Tex.—Data and prices on steam equipment, including steam kettles, vats and cutters suitable for cutting cactus.

Steam Pump.—A. P. Gilbert, Durham, N. C.—To purchase steam pump or pulsometer about 4-in. suction with boiler; good condition.

Steel (Reinforcing).—Port Commrs., Suite 200, New Orleans Court, Bldg., New Orleans, La.—Bids opened Aug. 10 to furnish approx. 103 tons of reinforcing steel, round and square, various sizes and lengths; plans on file at office of Supervisor of Purchases, 1 Canal St.

Steel Oil Barges.—U. S. Engr. Office, 329 Customhouse, New Orleans, La.—Bids unti Sept. 5 to construct and deliver two 4000 bbl. steel oil barges in Mississippi River at New Orleans; information on application.

Stone.—U. S. Engr. Office, 329 Custom House, New Orleans, La.—Bids opened Aug. 15 to furnish and deliver stone for Southwest Pass, head of passes and south Pass, Mississippi; further information on applica-

Street Light Poles.—Oscar C. B. Nau, Mgr., Chamber of Commerce, Corsicana, Tex.—Interested in having lamp posts erected by individual mfrs. so that a type suitable for the town can be decided upon and plans and specifications drawn for white way on principal streets.

Tank and Tower.—J. P. Briggs, Lynn Haven, Fin.—Best prices on 20,000 gal. cypress lumber water tank erected on 50 ft. steel tower.

Test Wells.—Port Commrs., Suite 200, New Orleans Court Bidg., New Orleans, La.—Bids opened Aug. 10 for boring test wells; one at Touluse and Dumaine Sts.; 15 ft. deep; 200 ft. well at ft. of Barrack St.; 150 ft. well at ft. of Port St.; plans at office of Supervisor of Purchase, 1 Canal St.

Tile.-Foster E. Scott, Carrollton, Mo.-

Transformer.—City Comsn., W. A. Evans, Chrmn., Jacksonville, Fla.—Bids until Aug. 24 to furnish 600 K. W. standard pole type transformers, complete with hangers, primary voltage 2200, secondary voltage 110-220 in varying sizes from 7½ to 50 K. V. A.; 500 K. W. single phase, oil cooled transformers of subway type, primary voltage 2200, secondary voltage 110-220 in varying sizes from 10 to 50 K. V. A. with pipe union type of bushings for secondary leads; f. o. D. City Store room, Jacksonville; information apply R. N. Ellis, Purchasing Agent.

Vats .- See Steam Kettles, etc.

Viaduct Construction.—City, Board of Pub. Works, Nashville, Tenn.—Bids until Sept. 7 to build East Nashville Viaduct; plans, etc., on file, or from Freeland, Roberts & Co., 1212 Independence Life Bidg., Nashville.

Vinduct Construction.—City, Board of Puolic Works, Nashville, Tenn.—Bids until Sept. 7 for following:

East Nashville viaduct.

East and West approaches of Church St. viaduct; 9600 cu. yds. reinforced concrete; 750 tons steel reinforcement; plans, etc., from City Engr., and Freeland, Roberts & Co., Consit. Engrs., 1212 Independent Life Bidg., Nashville.

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Water and Sewer Construction.—Washington Sanitary Comsn., Evans Bldg., New York Ave., Washington, D. C.—Blds until Aug. 16 to construct 11,500 ft. of 5 to 8-in. east iron water mains and 33,500 ft. of 6 to 10-in. sewers and appurtenances; plans with Robert M. Morse, Chf. Engr. of Dist., Hyattsville.

Water Heaters.—Duncan Machinery Co., (Mchy. Dealers) 721 N. Central Ave., Dempster Bldg., Knoxville, Tenn—Prices on used feed water heater for two 150 H. P. boilers, delivery nearest shipping point to Middlesboro and Pineville, Ky.

Waterworks Construction.—A. J. Rudd, Chrmn., Water Comsn. of City of Tulza, Okla.—Bids until Aug. 15 for construction of Spavinaw water supply project; work includes 50 ft. masonry and earth dam, 28 mi. of 60-in. and 25 ml. of 54-in. plpe, 78 in. tunnel 7000 ft. long, 350,000,000 gal. storage reservoir, 10,000,000 gal. high pressure reservoir and approx. 7 ml. cast iron or steel force mains; Trammell & Holway, Engrs., 229 Kennedy Bldg., Tulsa, Okla.; Dabney H. Maury, Constt. Engr., Chicago, Ill.

Wheat Elevator Equipment.—Dunn Wheat Co., 602 N. Broadway, Lexington, Ky.—Prices on wheat fans, blowers, steamers, steam retorts, boilers, wheat polishing machines, brush type.

Wire Brushes.—Henry D. McHenry, 422 W. Liberty St., Louisville, Ky.—To correspond with mfrs. of wire brushes.

Wire Fence.—Board of Awards, Richard Gwinn, City Register, Baltimore, Md.—Bids until Aug. 16 for wire fence at Bay View Asylum; plans with J. F. Crowther, Inspector of Bldgs.

Wire Mesh Reinforcing.—Port Commrs. 200 New Court Bildg., New Orleans, La.—Bids until Aug. 17 to furnish approx. 137,500 sq. ft. wire mesh reinforcing; specifications with Supvr. of Purchases, 1 Canal St.

Woodworking Machinery. — Lorick Lowrance, Columbia, S. C.—Data and prices on mchy, for making screen doors and windows.

Financial News

New Financial Corporations.

Mo., Clayton—The First National Bank of Clayton, Mo., capital \$25,000. Conversion of The Farmers & Commercial Savings Bank of Clayton, Mo.

Tex., Austin—The Atlantic Life Insurance Co., of Richmond, Va., capital \$300,000 surplus \$350,000, was given license to do business here.

Tex., Swenson—The Swenson National Bank of Swenson, Tex., capital \$25,000, succeeds the First Bank of Swenson. R. S. Ward, Correspondent.

Va., Emporia—The Citizens National Bank of Emporia, capital \$189,000, conversion of The Citizens Bank, incptd. with H. W. Hall, Prest., and W. T. Harding, Cashier.

New Securities.

Ala., Jackson—Water—Town votes Aug. 8 on \$36,000 bond issue. Address Town Countil.

Ark., Danville-Yell County Commrs., sold \$43,000 notes to J. L. Arlitt, Austin, Tex.

Fla., Apopka—Paving—City voted \$10,000 bonds. Address The Mayor.

Fla., Auburndale—Water—City sold \$30,-900 6% bonds to W. L. Slayton Co., Toledo, O., for \$29,000.

Fla., Bushnell—Road — Sumter County votes Aug. 29 on \$136,000 bonds. Address County Commrs.

Fla., Clearwater—Sewer and Park—City Council will hold election to vote on \$50,000 bond issue; \$30,000 Sewer and \$20,000 park bonds.

Fla., Eustis—Street and Sewer—City sold \$110,000 bonds to Atlantic National Bank, Jacksonville, Fla., at a premium of \$1503, and accrued interest.

Fla., Jensen—Bridge—St. Lucie County Commrs. voted \$125,000 bonds (Lately noted.)

Fla., Plant City—Municipal Improvements—City will receive bids Sept. 4 on \$150,000 of 6% 20-yr. bonds; \$1000 denomination. W. E. Lee Mayor.

Fla., Port Tampa—Board of Bond Trustees, Mrs. R. E. Davis, Clk., will receive bids until Aug. 15 for \$25,000 of 6% \$1000 denomination semi-annual bonds.

Fla., St. Petersburg—Power Plant, Harbor and Sewer—City, G. B. Shepard, Dir., sold \$365,000 5½% bonds to R. M. Grant & Co., New York, at a premium of \$14,100, and accrued interest. (Lately noted.)

Fla., Sebring—Road—Highlands County may vote on \$500,000 bonds. Address County Commrs.

Fla, Tampa—Road—Hillsborough County voted \$3,000,000 bonds. Address County Commrs. (Lately noted.)

Fla., West Palm Beach—Improvement— City Comsn. sold \$71,000 6% bonds of \$1000 denomination, to Prudden & Co., Toledo, Ohio for 99.30.

Fla., West Palm Beach—School—City sold \$200,000 6% bond issue to Bessemer Investment Co., New York City, for \$215,055. (Lately noted.)

Fla., Wildwood—School—City voted \$5000 bond for rebuilding of school. Address The Mayor.

Ga., Athens—Clarke County Commrs. or Road and Revenues, Tate Wright, Clk., will receive bids until Aug. 22 for \$150,000 permanent road and bridge bonds, and \$50,000 bonds for educational purposes.

Ga., Blakely—Paving—City sold \$15,000 5% bonds to The Citizens' Bank, of Blakely, at par and expenses.

Ga., Bremen—School—G. E. Bell, Clk. of City Council, receives bids until Aug. 5, for \$10,000 6% bonds; \$1000 denomination.

Ga., Butler—School—Butler High School District sold \$20,000 6½% bonds to J. H. Hilsman & Co., Atlanta, Ga., for \$20.665. (Lately noted.)

Ga., Cave Spring—School—J. Scott Davis, Chrmn. Board of Trustees, recevies bids until Aug. 8, for \$60,000 5% bonds; \$1000 denomination, dated July 1, 1922.

Ga., Macon—School—Bibb County votes Sept. 13, on \$500,000 bond issue. Address Chamber of Commerce.

Ga., Quitman—School — Barney School Dist. of Brooks County voted \$25,000 bonds Address County School Commr.

Ga., Savannah—Road and Bridge—Chatham County, G. Reuben Butler, Clk., sold \$250.000 4½% bridge and \$250.000 4½% road bonds to Exchange Bank of Savannah, at 100.626. (Lately noted.)

Ga., Thomasville—Paving—City voted \$75,-000 bonds. Address The Mayor.

La., Baton Rouge—Road—East Baton Rouge Parish Police Jury, Ward 4, votes on \$125,000 bonds.

La., Columbia—Improvement — Mayor H. D. Rogers, receives bids until Aug. 23 for \$13,000 5% water and electric light bonds.

La., Houma—Road—Terrebonne Parish Police Jury, Jean L. Caillouet, Prest., sold \$80,000 5% bonds to The Peoples' Bank & Trust Co., par, accrued interest, plus a small premium. (Lately noted.)

La., Monroe—School—City will receive bldw until Aug. 15 for \$400,000 bonds; Arnold Bernstein, Mayor.

La., New Iberia—Drainage—Chas. L. Provost, Secy. receives bids until Aug. 22, for \$46,000 Sub-Drainage District No. 3, of the Bayou Carlin Drainage Dist. bonds.

La., Oak Grove—School—Pioneer School Dist. No. 4, voted \$20,000 6% bonds. Address School Commrs.

La., Port Barre—School—Durald City Consolidated School Dist. wil lvote Aug. 12 on \$15,000 bonds. Address School Commrs.

La., Rayville—Levee—J. W. Summerlin, Prest., Board of Commrs. of the Texas Basin Levee Dist., receives bids until Aug. 25, for \$120,000 5% bonds; \$1000 denomination.

La., Shreveport—School — Citizens voted \$1,000,000 bond issue. Address The Mayor,

La., Ville Platte—School—Evangeline Parish School Board sold \$90,000 Mamou Dist. and \$20,000 Vidrine Dist. bonds to M. W. Elkins and Co., for par and accrued interest, (Lately noted.)

La., Winsboro—Water and Sewer—Mayor, W. H. Adams, receives bids until Aug. 10, for \$80,000 bonds. (Lately noted.)

Md., Annapolis—Bridge—Anne Arundel County Commrs., receives bids until Aug. 29, for \$50,000 South River Bridge Bonds; \$500 denomination.

Md., Frederick—School—County Commrs. sold \$20,000 4%% bonds of 1000 denomination, to a syndicate composed of Baker, Watts & Co., Nelson, Cook & Co., and Towsend Scott & Son. (Lately noted.)

Md., Hagerstown—School—County Commrs. of Washington County, receives bids until Aug. 15, for \$300,000 4% bonds; \$1000 denomination, dated July 1, 1922.

Md., Hagerstown—School—County Commrs. of Washington County, receives bids until Aug. 15, for \$300,000 4% bonds; \$1000 denomination, dated July 1, 1922.

Md, Hampstead — Street Improvement— Carroll County Commrs. sold \$20,000 5% bonds to Stern Bros. & Boyce at 100.116.

Miss., Inverness — School — Inverness School Dist., Sunflower County, sold \$60,000 6% bonds to G. H. Walker & Co., St. Louis.

Mo., Fayetteville—P. O. Warrensburg—Water—Fayetteville Water Dist., Jay Fulbright, Prest., sold and delivered \$50,000 bond issue, to I. H. Nakdimen, Fort Smith, local banker.

Mo., Mansfield—School—City sold \$11,000 bond issue to the Commerce Trust Co., Kansas City, for par, \$392.77 and expenses. (Lately noted.)

Mo., Sarcoxie—Waterworks—Mayor, W. B. Hale, sold \$12,000 6% bonds to Commerce Trust Co., Kansas City, Mo. (Lately noted.)

Mo., Washington—City Hall—City will vote Aug. 15 on \$35,000 bond issue. Address The Mayor.

N. C., Asheville—Parks, Playgrounds and Roads—City votes Aug. 22 on \$1,000,000 bonds; F. L. Conder, Secy.-Treas., Board of Commrs.

N. C., Black Creek—Electric—City soid \$10,000 6% electric bonds to J. L. Arlitt, Austin, Tex.

N. C., Gastonia—School—City voted \$150, 000 bonds. Address The Mayor.

N. C., Hillsboro—Paving—City, Board of Alderman, plans issuing \$40,000 bonds. N. C., Louisburg—Street Improvement—A. 2.

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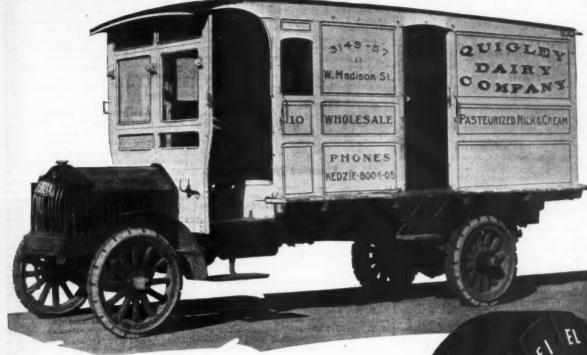
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Soon the whole fleet will have Caterpillars

Caterpillar tires have given such satisfactory service on the trucks of the Quigley Dairy Co. of Chicago that this company is now replacing all other types of tires with Caterpillars as told in its letter printed below.

"We have used tires of other makes on some of our trucks and decided to put on Kelly-Springfield Caterpillar tires. The service rendered was so satisfactory that we decided to replace all of our wheels with Caterpillar tires.

"Our trucks run under all conditions, every day in the week on the streets of Chicago and after nineteen months of service, we are considering having one set of tires changed. We consider this good service under the condition on which we run and are very glad to recommend Kelly-Springfield Caterpillar tires at any time."

In addition to exceptional traction and resiliency Caterpillars also give double the average mileage of any other type of tire which makes them not only more satisfactory but also more economical.

> Caterpillars are made in sizes suitable for trucks of every type and weight

Kelly-Springfield Tire Co.

GENERAL SALES DEPARTMENT

250 West 57th Street NEW YORK, N. Y.



W. Alston, Town Clk., receives bids until Aug. 14, for \$25,000 6% bonds; \$1000 denomination.

Okla., Norman—Road and Bridge—Cleveland County Commrs., called election Aug. 1, for voting \$500,000 road and \$100,000 bridge bonds.

Okla., Woodward—Bridge — County Commrs., called election Aug. 1 to vote on \$210,000 bonds.

S. C., Blacksburg—Street—Mayor, J. F. Belue, receives bids for \$30,000 5 \% % bonds, dated Aug. 1; \$1000 denomination. (Lately noted.)

S. C., Chester—School—John C. Stewart purchased \$25,000 of 6% bonds for 101, with \$275 premium.

S. C., Florence—Paving—City may vote on \$100,000 bonds. Address The Mayor.

S. C., Gaffney—School—City sold \$16,500 bonds to J. H. Hilsman & Co., Atlanta, Ga., at par.

S. C., Lake City—School—Lake City School Dist. voted \$65,000 bond issue. Address School Trustees.

S. C., Mullins—School—Mullins School Dist. No. 16, voted \$45,500 bond issue. Address School Trustees.

Tenn., Manchester—Road—Coffee County, John P. Buchanan, Chrmn., receives bids until Aug. 10, for \$300,000 5% higeway bonds. (Lately noted.)

Tenn., Pulaski—Highway — Glies County Court, A. H. Harris, Cik., sold \$94,000 5 \(\frac{5}{6} \) % bonds to The Union Trust Co., East St. Louis, Ill. (Lately noted.)

Tex., Brownfield—Electric—City voted \$16,-000 6% bond issue. Morgan L. Copeland, City Secy. (Lately noted.)

Tex., Bryan—Paving, School—City, Guy P. Bittle, Secy, will issue \$42,000 of 6% bonds, including \$32,000 for paving, and \$10,000 for schools.

Tex., Dallas—School, Improvement, and Sewer—M. G. James, City Secy., receives bids until Aug. 9, for \$560,000 5% school, \$140,000 improvement, and \$100,000 sewer bonds; \$1000 denomination.

Tex., Denison—Improvement—City voted \$175,000 bonds; \$65,000 street, \$50,000 school, \$50,000 water, and \$10,000 sewer bonds. Address The Mayor.

Tex., Fort Worth—Water and Sewer—J. C. Lord, Commrs., will soon order election to authorize the issuance of \$500,000 bonds.

Tex., Galveston—School, Street, Pumping Station—Chas. A. Keenan, Mayor, voted \$1,-225,000 bonds, including \$1,000,000 school, \$100,000 street and \$125,000 pumping station.

Tex., Hillsboro—School — Hillsboro Independent School Dist. Commrs., Tyler County, sold \$80,000 bonds to Breg, Garrett & Co., Dallas, at par less a discount of \$1000.

Tex., Houston—School — Harris County Common School District No. 45, votes Aug. 19, on \$10,000 bond issue.

Tex., Kernes—School—Kernes School Bd., sold \$35,000 bonds.

Ter., McLean—Light and Water — City voted \$74,000 bond issue. Address The Mayor.

Tex., Oakville—T.ck Eradication Warrants
—Live Oak County Commrs., sold \$15,000
6% bonds to J. L. Arlitt, Austin, Tex.

Tex., Roscoe—School—City sold \$10,000 Roscoe Independent School District 5% bonds to J. L. Arlitt, Austin, Tex.

Tex., Seymour—City Hall, Park and Water—City will rate Aug. 8, on \$40,000 city hall, \$8000 park and \$25,000 water bonds. Address The Mayor.

Tex., Wichita Falls—Hospital—Wichita County votes Aug. 22, on \$150,000 bond issue. Address J. P. Jones, Co. Judge.

Tex., Wichita Falls—School—Wichita Falls Independent School Dist., W. W. Brown, Secy., sold \$850,000 5% bonds, to Sanders R. Fuller, Austin, Tex., for 98.16. (Lately noted.)

W. Va., Charleston—Paving—City Council authorized the issuance of \$193,000 6% bonds; \$1000 denomination.

W. Va., Northfork—Fire, Water, Paving and Sewer—Citizens voted \$23,000 bond issue, validated by E. T. England, Atty. Gen., W. Va. Address Common Council.

Financial Notes.

Fla., Bushnell—The Citizens' Bank of Bushnell increased its capital from \$15,000 to \$25,000.

Ga., Macon—The Georgia Banking Co., has applied for charter. Turpin & Lane, Attys.

Ky., Covington—The Bourbon Perpetual Building and Loan Assn., increased its capital to \$375,000.

Tenn., Knoxville—Knoxville Savings & Loan Bank, increased capital to \$200,000.

Tex., Buda—Farmers National Bank of Buda, has been granted a charter, it being a conversion of the Farmers State Bank of Buda. Capital \$30,000.

Va., Fries—The National Bank of Fries, capital \$40,000, made application to convert. F. L. Elkins, Correspondent.

Trade Literature.

Testing of Textile Fibres, and Materials.

The Testing House and Laboratory of the Manchester, (England), Chamber of Commerce is interestingly described and illustrated in a booklet by Fred W. Barwick, director. The testing house, which recently occupied new and larger premises, was originally intended to make official tests of cotton yarn, but developments have been so great that its work now also includes practically every description of physical and chemical testing commonly applied to the different textile fibres, yarns and fabrics, besides the inspection of textile materials, the testing of wood pulp and the analysis of various substances used in industry. The booklet is finely made up.

Unique Business Folder.

A unique and attractive folder has just been issued by the Van Dora & Dutton Co., gear manufacturers, of Cleveland, Ohio. It is entitled "Bringing the Van Dorn Plant Home to You," and on the cover is a picture portraying a postman with a large representation of the plant which he is delivering to an addressee. Inside the folder is a complete narrative profusely illustrated, concerning the entire plant, department after department, just as any one would view it in making a tour of inspection. The manufacturers will send a copy of the folder to any one who requests it.

Cement Machines Finely Described.

Two excellent and attractively prepared publications have been issued by the American Cement Machine Co., Inc., Keokuk, Iowa, concerning their equipment for contractors and others. One of them is a catalog of large pages relating to the "Boss" mixers of the heavy duty type, which it is stated, are used the world over." They are made in

all sizes from one-half bag to five bags capacity and they are equipped with steel roller philon drive. A 2-in-1 combination building and paying mixer is also described and pictured in the same book, besides engines, steel trucks, power loaders, etc. The second publication concerns specifically builders mixers and, like the other, is liberally and accurately illustrated. Other products included are holsts, grouters, pavers, carts, and pumps.

Saving Money in Blasting.

The Hercules Powder Co., Wilmington, Del., has published a 56-page book entitled "Eliminating Waste in Blasting," written by N. S. Grinsfelder, author of the "Scientific Selection of Explosives for Coal Mining" and other kindred works. It will interest everyone concerned with explosives as it tells of how some companies are preventing waste, besides giving recommenda. tions made by the Hercules company. There are chapters on planning work, drilling, choice of explosives, advantages of No. 8 blasting caps, use of stemming and the prevention of waste in firing. The tabular data and the diagrams will be particularly appreciated by practical men in this line of work, but there are also several interesting pictures of important blasts made at different places throughout the country and which are of general interest

The Use of Fuel Oil.

"Koerting Fuel Oil Burning Systems" is the name of a notably fine catalog issued by the Schutte & Koerting Co., Philadelphia, Pa., and while planned primarily for advertising it contains so much information about the installation, the operation and the maintenance of oil burning plants, their requirements, characteristics and their functions that it will be of general interest to a very wide circle of readers. The book consists of several bulletins held together in a specially prepared cover that is handsome and substantial. The entire work is composed with taste and skill and it is abundantly illustrated, many of the pictures being done in colors with advantage as well as attractiveness.

Diamond Drilling in Oil Regions.

Bulletin 69-0 of the Sullivan Machinery Co., Chicago, covers "Diamond Drilling for Oil" which is its title. It is fully and finely illustrated and contains much interesting and valuable reading. Work with the diamond drill includes three different classes, thus: 1-structure testing, 2-wildcatting, 3-production drilling. Concerning the latter it is interesting to note that the first drill shipped to the Tampico field recently completed its third hole at a depth of 1950 feet. bringing in, it is stated, 800 barrels of oil, the hole being bored in the exceedingly rapid time of 29 days actual working. The first part of the book comprises a summary of the advantages of diamond drilling in the oil fields.

Turbine and Generator Units.

The Allis-Chalmers Manufacturing Co., Milwaukee, Wis., has issued a new bulletin, No. 1122, covering steam turbine and generator units of the condensing and non-condensing type, with pressure operated by pass valve. These units are particularly adapted for use in sugar mills, refineries, saw mills, power and manufacturing plants of various kinds The book is accurately and comprehensively illustrated, many of the pictures giving sectional views of the machines, others showing them as they appear after being in-There are also complete descripstalled. tions and the entire publication is representative of the best work in the arts of printing and engraving.

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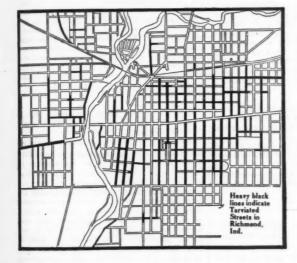
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Liberty Pike, Richmond, Ind. "Tarvia-B" over waterbound macadam North 15th Street, Richmond, Ind.—Macadan maintained with "Tarvia-B"

Chester Pike, Richmond, Ind.—Macadam maintained with "Tarvia-B"





Here's what Richmond, Ind., thinks of Tarvia-

Up to four years ago, the streets of Richmond, Indiana, were much like those in hundreds of other towns throughout the country. They were muddy in wet weather, dusty in dry spells and generally "hard going" at any time, both on the traffic and the taxpayers.

But in 1918 Richmond stepped out of the mud and dust and inaugurated a program of mudless, dustless, all-year Tarvia roads. Describing Richmond's experience with Tarvia, Mr. D. B. Davis, City Civil Engineer, writes:

"It is with considerable pleasure that I report to you our success with Tarvia. This year makes the fourth successive one in which we have used your materials.

"We have developed here a Tarvia treated gravel pavement which is so popular for residence streets that the demand each year is beyond our ability to construct. Observation of the service rendered by streets which have been surface treated during the past four years has convinced our people of the economy and serviceability of Tarvia for this purpose.

"In connection with our surface treating we repair all small depressions which occur in our 40 miles of gravel and macadam streets. A maintenance patrol is employed constantly on this work and, odd as it may seem, we have no ruts in any of our pavements."

There is a grade of Tarvia for every road purpose-new construction, repairs and maintenance.

Illustrated Booklets free upon request.



















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INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisems as from severtisers.

Elected to Fellowship

Gerard Swope, president of the General Electric Co., Schenectady, N. Y., has just been elected a fellow of the American Institute of Electrical Engineers. Fellowship is the highest grade of membership and it is distinguished by the fect that the president of the Institute may be chosen only from among the fellows. Qualifications for fellowship in the organization are extremely rigid and can be met only by men of very broad training and experience. Mr. Swope graduated from the Massachusetts Institute of Technology as an electrical engineer in 1895 and during a summer vacation he worked in the Chicago shops of the General Electric Co. for \$1 a day. His first regular work was in the Western Electric Co. shops where he rapidly advanced and became general manager of the power apparatus business. In 1908 he was made general sales manager and in 1913 vice-president and director in charge of all commercial work in this country and abroad, his foreign duties also including manufacturing and engineering work. While in Japan the Emperor decorated him with the Order of the Rising Sun. He was made a Chevalier of the French Legion of Honor for war work and also has the Distinguished Service Medal of the United States. In 1919 he became president of the International General Electric Co., and lately was elected to the position which he new holds.

New York Branch Opened.

The Ansley Lumber Company of Tampa, Fla., has opened a branch office at Room 223, No. 15 Whitehall Street, New York City, under the charge of Geo. P. Wylly, to take care of its business in the Manhattan district, and ha will make a specialty or cargo and steamer shipments to Boston, New York, Philadelphia and Baltimore. Mr. Wylly grew up in the European branch of the export lumber trade and for the past 20 years has been employed largely in the domestic trade handling yellow pine, hardwood and cypress. He has been located in New York City for the last six years, during which period he has been in close touch with the trade of that section and will doubtless prove a valuable addition to the company's force.

Manufacturing Plant Reorganized.

The Fire Grate Radiator Heating Corporation of Knoxville, Tenn., at a meeting of stockholders July 27, elected W. E. DeArmond, president, J. E. Holstrom, vice-president and manager, and W. B. Mooney, secretary-treasurer. In additions to these officers, G. H. Kaiser, of Knoxville and R. L. Hyder, of Maryville, Tenn., were elected directors. The company's plant, it was stated, is practically fully equipped and was expected to begin operations August 1. The company makes a patented open fire grate with a boiler which permits the heating of houses up to the size of 12 rooms from one open fireplace and at a very low rate of coal consumption.

Important Sale of Manufacturing Plant.

The plant of the Ross Machine Co., at Wollaston, Mass., is to be sold under a court decree on Wednesday, August 16, and Thursday, the 17th, the auction to take place on the premises beginning at 10.30 A. M. each day. The real estate included is in two

lots and there are also machine tools, precision machine tools, small tools, mechanical equipment, foundry equipment, and 40 tons of steel, iron, brass, etc. Altogether the catalog of the sale comprises more than 1100 lots. The auctioneers are J. E. Conant & Co., of Lowell, Mass. Further particulars will be found in the formal announcement elsewhere in this issue.

Water, Sewer and Drainage Work.

The 44th semi-annual report of the Sewerage and Water Board, New Orleans, La., contains much information relating to the public works of that municipality of interest to contractors and others. It includes maps showing the completed portions of the water system, the sewer system, and the drainage system, besides containing a great deal of reading matter concerning the work that has been done and what it is proposed to to do, together with financial particulars as to the operations of the departments.

Book Reviews.

Converting a Business Into a Private Company. By Herbert W. Jordan. London: Jordan & Sons, Limited. 1922.

This little book of 48 pages outlines in a readable and comprehensive way the advantages of converting an individual or a partnership business into a company affair and also the manner of making the change. A great many details are given to round out the subject, and although the composition of the work is written from the English point of view and in harmony with the laws of Great Britain, it can be read with profit by business men in the United States.

Office at Los Angeles.

The Henry Exall Elrod Co., Dallas, Tex., has established a branch office at Los Angetse. Calif., where Mr. Elrod will have his personal headquarters; the Dallas office will be continued under the charge of Mr. Drennan. Mr. Elrod, in addition to his regular line of professional work, will pay considerable attention to sanitary work in his western location.

As We Were Saying. By William Feather. Cleveland: The William Feather Company. 1921.

This is a comparatively small book-less than 150 pages of large type-but the ideas therein are very numerous, instructive and entertaining. The title is suggestive of the contents; it is a chatty sort of work, the kind that is easy to read and what the author has to communicate is put in such a way that it is easy to remember. He considers everything pretty much which goes to make up life and his views and opinions are generally sound and good. One of his conclusions merits thought and preservation by all of us. He says: "Were the good things of life ever so easily at the command of the ordinary man as they are today? To be perfectly frank, don't we all do a lot of welching that we haven't any right to do? And if we aren't careful, isn't there danger that we will upset the greatest civilization the world has ever known?" In immediate connection with the thought he acknowledges that he himself kicks, and wonders what alls the world, but he evidently thinks that his kicking is not justified nor is that of the great majority of others who do likewise. Optimism is his forte, evidently. It should be. J. P. Morgan, the elder, said he was "Always a bull on the United States." That idea is better today than ever.

Purchasing Principles and Practices. By John C. Dinsmore, Ph. B. New York. Prentice—Hall, Inc. 1922. \$6.

In this comprehensive volume of 293 pages, Mr. Dinsmore, who is purchasing agent for the University of Chicago, and also secretary and treasurer of the Purchasing Agents Association of that city, describes completely the work of purchasing agents in modern business establishments, illustrating his illustrating his text with reproductions of forms, tables, etc. The organization of an efficient purchasing department is outlined in detail and also the procedure that is necessary for its effective operation. The book does not only generally discuss its subject but presents a full study of the more important commodities of commercial markets, describing types and grades of each, purposes to which they are adapted, specifications, inspections, etc. Among the products thus considered are paper and its various forms, coal, steel, etc. The principal purpose of the author is to direct readers concerning the way to accomplish economies in purchasing. The chapter headings are indicative of the general nature of the contents and among these are the following: "Factors in Price Changes," "Qualifications for Success." "Ethics of the "Ethics of the Profession," "Purchase and Care of Office Equipment," "Budget Control of Purchases by Detailed Estimates," "Purchase of Advertising," "Coal for Steam and Heating." "Salvage Now a Science," "Progress in Co-Operative Buying," and "Practical Problems for Solution." The information and the suggestions given concerning the buying of the several other products which are considered will be found of great value to everyone interested. The volume is handsomely bound and the press work is of the best.

The Work of the Stock Exchange. By J.
Edward Meeker. New York: The Ronald
Press Company, 1922, \$5.

This work gives full and authoritative information of the operation of the New York Stock Exchange and as to its position in the business of the country. The author, Mr. Meeker, being economist to this exchange, presents a wealth of facts and detailed information in a direct and comprehensible style. He tells of how the morale of the membership is sustained and preserved the disciplining of members when necessary, protection of investors, the fight of the exchange against "bucket shops," how securities are distributed, the underwriting of security issues, and how the exchange helps, the details of buying on margin and of selling short. Full particulars are given as to just how an order is given by a customer and how it is executed through the various channels it has to traverse before it gets to the floor of the exchange, say from a distant city. It is also pointed out that the stock exchange offers a free and open market for a great variety of securities which must be approved by a committee of the exchange before they can be listed. Furthermore, the exchange directs capital into industry and it serves banking in various ways, which are described most interestingly. The book is adequately illustrated and its more than 600 pages will afford exceedingly entertaining reading for anyone interested in the purchase and sale of either stocks or bonds, or in investments therein.

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MARYLAND TRUST COMPANY

BALTIMORE

Transacts a General Trust and Banking Business

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We extend the facilities of our organization to those desiring detailed information or reports on any of the companies with which we are identified.

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SOUTHERN We Buy MUNICIPAL

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NOTICE TO CONTRACTORS

We want to buy bonds issued by cities, towns counties, school, road or drainage districts that you may be able to take in exchange for work. Address us at our nearest office.

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WE BUY MUNICIPAL BONDS

We are interested in the purchase of Southern Municipals including road, school, county, drainage and levee bonds.

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We Buy Bonds
City, County, School and Road, from
Municipalities and Contractors WRITE

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WE BUY MUNICIPAL BONDS

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THE W. H. SILVERMAN CO.

309 Mercantile Library Bldg.,

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Cincinnati, O.

Write us if you have any for sale.

FIFTH SOUTHERN TEXTILE EXPOSITION

TEXTILE HALL

GREENVILLE, SOUTH CAROLINA

October 19th to 25th Inclusive

Will open at ten o'clock. Thursday morning, October 19th, will be closed Sunday and re-open Monday. It will end Wednesday night the 25th.

This exposition is one of the most important events of it's kind in the world. The South spins and weaves a large portion of the earth's production of cotton.

Here will be seen textile machinery, devices, appliances and supplies. No manufacturer can afford not to be informed of the latest inventions, improve-ments and equipment. The superintendent, overseer or secondhand who misses this will be handicapped in performing his work. Every mill operative, who can possibly do so, should visit it.

Numbers of mills consider payment of expenses of principal employes to and from the show, a good

It will require several days to see all the show. One day however, is better than none.

We invite all who have an interest in the industrial development of the country to attend.

TEXTILE HALL CORPORATION

FOREIGN NEEDS

General Merchandise.

JULIO RAMIREZ JOHNS & Co., Mendellin, Barranquilla, Columbia, S. A.—We are anxious to connect with some concern exporting general merchandise on a very large scale. At present we are representing Story & Clark Piano Co., 315-317 South Wabash Ave., Chicago, Ill.; Warner Bros. & Co., Inc., 347 Madison Ave. and 45th St., New York City, and others.

Photoplays and Merchandise.

GUALANI IMPORT COMPANY, Napier Road, Karachi, India.—We are distributors of picture-plays and importers of general merchandise on hire and commission systems respectively. We shall, therefore, be glad to hear from anyone desiring to establish business relations in such lines.

Tools and Machinery.

Luis Mayor, Apartado de Correos, No. 120, San Sebastian, Spain.

—We are interested in all kinds of tools for mechanical cutting purposes, for work on wood and on tinware. We are also interested iff machinery for the same purposes.

Flour Prices and Samples Desired.

Bensussan & Sides, Salonica, Greece.—As the importation of flour is now free, we desire to obtain from exporters of first-class standing samples and prices (commission of one per cent included for us) of such flours as "Pura," "Colossus," "Orlando," "Ivoris," Salonica, (including all war risks), net cash by letters of credit out of a first-class bank in New York against shipping documents. "Canada Best," "Gold Medal," and "Nelson," to be delivered c.i.f.

Tools and Hardware.

Walter P. Notcutt, Ltd., 8 White Street, Moorefields, E. C. 2, London, England.—We have been established since 1884 and represent a few of the principal American manufacturers of hardware, woodenware and tools as sole sales representatives for Great Britain and Ireland. We are open to negotiate with a few manufacturers of lines which will not compete with our present ones, although selling to the same class of trade. We have a large and valuable connection throughout the country, and would like a first-class line of mechanics' hand tools and builders' hardware.

Gloster, Miss., Wants a Dairyman.

O. P. McPherson, Sect'y., the Gloster Board of Commerce, Gloster, Miss., writes the Manufacturers Record: "The dairy industry is growing so rapidly in this section, that our farmers are in need of good dairymen, and I am asking you to assist us in procuring same."

New Apartment House Planned for Norfolk.

Norfolk, Va., Aug. 5—[Special.]—The Garden Terrace Corporation plans the construction of the 4-story and basement apartment house to contain 60 apartments. Herbert W. Simpson, Board of Trade Bldg., is the architect for the structure.

The Superpower Project.

By KIRBY THOMAS.

The plan to reconstruct and unify the whole power facilities of the region extending from Boston to Washington and 100 to 150 miles inland which has been proposed by a special government commission, called the Superpower Survey, seems at first suggestion to be superambitious. However, the Survey, which has made more than a year's study of the problems involved, finds that the project is entirely practicable and that most surprising benefits will result from its adoption.

The area involved in this plan requires more than 10,000,000 horse-power, or one-fourth of the total for the whole country. This is exclusive of the power needed for the railroads, which is about 7,500,000 horse-power more.

The plan proposed is the construction of a high voltage, 220,000 electric potential, main trunk power line extending from Boston to Washington. Into this great "common carrier" will flow electric energy which it is proposed to generate at great central stations, some of them with a capacity of 300,000 horse-power produced by steam turbo generators of 30,000 horse-power rating. These will be located at strategie points on tidewater and in or near the eastern coal fields. In addition the surplus hydro-electric power in the region will flow into this main power line reservoir and probably also power from the projected international water power installation on the St. Lawrence River and from Niagara Falls when the power aspect there is increased. Any power available regularly or intermittently from existing plants will likewise be utilized. From the main power line a system of connecting lateral distributing lines will be run so as to serve every power need of the area completely and dependably.

It is obvious that such a plan will result in conserving and equalizing the power facilities of the important region affected, but the actual money savings as estimated by the Survey is most startling. It is asserted that the economy in coal used alone will be 30,000,000 tons annually, equivalent to \$150,000,000. Other direct benefits and gains are estimated which bring the total saving over present cost to more than double this amount. The result will be more, better and cheaper power, a basic advantage that cannot long be delayed in fulfillment.

The realization of this project, which it is expected can be accomplished by 1930, will cost several billions of dollars, which great outlay will be justified many times over by the annual money saving. It is proposed that the plan shall be carried out as a private commercial undertaking under the full regulation of federal and state authorities and with the existing power utilities, which it does not contemplate to disarrange, co-operating in the financing and as buyers and

YOUNG & SELDEN COMPANY

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HAMMERMILL LETTER HEADS

For Bank, Mill, Mine, Factory and Commercial House 8 ½ x 11—Full 20 lb. Weight 1000—35.85 2000—8.70 10000—28.50

2000—— 8.70 10000—— 28.50
Shipped 48 Hours After Receipt of Order
Charges prepaid to your railroad station
Samples on request

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Industrial Opportunities Raw Material

The Seaboard Air Line Railway is in the Hydro-Electric Zone of the Carolinas, Georgia and Virginia.

Locations for industrial plants of all descriptions are available.

North Carolina produced about onetenth of the cotton crop of the United States in 1921-1922.

A look at the map will show Hamlet, N. C., with railroads in all directions, to be the center of a great raw material section of North and South Carolina.

Information in detail is available upon application to:

JESSE M. JONES, General Development Agent Seaboard Air Line Railway Norfolk, Va.

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Is Money Ever "Spent" for Advertising?

A young and energetic executive took hold of a fine old retail business in New York.

"What this business needs," he told himself, "is a place in the mind of the public."

And deliberately he set out to sacrifice the greater volume of his profits and invest the sacrifice into the building of goodwill.

He did. And to this old business, advertising was the breath of life.

For six months had not passed before the business had grown so that ing?

the advertising cost was a smaller percentage than ever it had been, and, because of a larger volume, the shop effected economies and gave far superior service.

That was five years ago. Today a certain percentage is spent, or supposed to be spent, for advertising. But as fast as the appropriation is spent, the more the business increases; and the more that the business increases, the smaller the percentage becomes.

Is money ever "spent" for advertis-

Published by the MANUFACTURERS RECORD in co-operation with The American Association of Advertising Agencies

PROPOSA

BOND ISSUES

BUILDINGS

GOOD ROADS

Bids close August. 21, 1922.
U. S. Engineer Office, Baltimore, Md.—
Sealed proposals will be received here until
1 P. M., daylight saving time, August 21,
1922, and then opened for dredging in Baltimore Harbor and Channels. Further information on application.

Bids close August 14, 1922.

PROPOSALS FOR LEVEE WORK.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a. m., August 14, 1922, and then opened, for constructing about 29,400 cubic yards of earthwork in the Upper and Lower St. Francis and White River Levee Districts. Further information on application.

Bids close September 5, 1922.

PROPOSALS FOR SPURDIKE CONSTRUCTION.—U. S. Engineer Office, 329 Customhouse, New Orleans, La.—Sealed proposals will be received here until 9:00 a.m., Sept. 5, 1922, and then opened, for construction of spurdikes at Head of Passes, Mississippi River. Further information on application.

Bids close September 5, 1922.

PROPOSALS FOR STEEL OIL BARGES.
—U. S. Engineer Office, 329 Customhouse,
New Orleans, La.—Sealed proposals will be
received here until 9:00 a. m., Sept. 5,
1922, and then opened, for construction
and delivery of two 4000-barrel steel oil
barges in the Mississippi River, at New
Orleans, La. Further information on apwilcation.

RATE: 35 cents per line per insertion. PUBLICATION DAY: Thursday. FORMS CLOSE 4 P. M. Monday.

DAY LETTER: When too late to send

copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements

The same rate applies-35 cents per line per insertion.

Bids close August 12, 1922.

Bids close August 12, 1922.

TREASURY DEPARTMENT, Supervising Architect's office, Washington, D. C., July 18, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., August 12, 1922, for furnishing and installing a new oil-burning apparatus, etc., at the U. S. Post Office and Court House, Houston, Tex., in accordance with specification and drawing, copies of which may be had at this office or at the office of the Custodian, Houston, Tex., in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close August 31, 1922.

TREASURY DEPARTMENT, Office of the TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C. August 4, 1922. — SEALED PROPOSALS Will be opened in this office at 3 P. M. August 31, 1922, for remodeling and extension of kitchen and mess building, etc. and for construction of new ward units Nos. 1 and 2, and isolation ward and quarters for nurses and for attendants (except mechanical equipment) for the United States Marine Hospital at Baltimore, M. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individuals, firms of corporations possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations, Jas. A. Wetmore, Acting Supervising Architect.

Bids close August 23, 1922.

Bids close August 23, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., August 1, 1922.—SEALED PROPOSALS will be received at this office until 2 p. m., August 23, 1922, and then opened, for remodeling post office screen in the United States Post Office, Fairmont, W. Va., in accordance with Drawing No. 29A and the specification, copies of which may be had at this office or at the office of the Custodian, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Rids close August 31, 1922

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Aug. 5, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., Aug. 31, 1922, for the Mechanical Equipment of two new Ward Buildings, Isolation Unit, Nurses' Quarters, Attendants' Quarters, Kitchen and Mess Hall, Boller House, Outside services, Plumbing, etc., in three present ward buildings and Administration building, etc., for the U. S. Marine Hospital, at Baltimore, Md. Drawings and specifications may be obtained at this office in the discretion of the Supervising Architect. Proposals will be considered only from individual firms, or corporations, possessing satisfactory financial and technical ability, equipment, and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of the fact that any

Bids close August 28, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office. Washington. D. C., August 7, 1922.—SEALED PROPOSALS will be opened in this office at 2 p. m., August 28, 1922, for furnishing and installing fly screens in the buildings of the U. S. Public Health Service Hospital, at Augusta, Ga., in accordance with the specification and drawings listed in same. copies of which may be obtained from J. M. Geary, Superintendent of Construction at the hospital site, Augusta, Ga., or from this office, in the discretion of the Supervising Architect.

Bids close August 15, 1922.

TREASURY DEPARTMENT, Supervising Architect's office, Washington, D. C., July 17, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., August 15, 1922, for furnishing and installing complete, an Electric Motor Driven Turbine Pump in the U. S. Post Office at St. Louis, Mo. Specification may be obtained at this office or at the office of the Custodian, St. Louis, Mo., in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close August 24, 1922.

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Bids close August 24, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office. Washington, D. C., August 3, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., August 24, 1922, for building Roads and Walks on the site of the U. S. Public Health Service Hospital No. 62, Augusta, Ga., in accordance with the specification and drawings, epies of which may be had from J. M. Geary, Superintendent of Construction at the hospital site, Augusta, Ga., or at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect,

PROPOSALS FOR CORRUGATED ROOF-ING, WROUGHT IRON OR STEEL PIPE, Range Boilers, Water Buckets, Wire Netting. Cable Clips, Turnbuckles, Machine Bolts, Brass Tubing; Paint, Varnish and Floor Brushes; Street Brooms, Artificial Leather, Seather Belting, Packing, Inner Tubes, Car Seat Webbing, Emery Cloth, Paint, Calcium Carbide, Carbon Bisulphide, Stearic Acid Candles, Water Closet Seats, Barber Pole, Scythe Stones, Polishing Wheels, Rotators, Cotton Line, Twine, Writing Paper, Paper Drinking Cups; Ash and Yellow Pine Lum-ber. Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10:30 o'clock a. m., August 16, 1922, at which time they will be opened in public. for furnishing the above-mentioned articles. Blanks and information relating to this Circular (1489) may be obtained from this office or the offices of the assistant purchasing agents, 24 State Street, New York City, 611 Gravier Street, New Orleans, La.; and Fort Mason, San Francisco, Calif; also from the United States Engineer Offices in the principal cities throughout the United States.—A. L. Flint, General Purchasing Bids close August 28, 1922

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 27, 1922.—SEALED PROPOSALS will be opened in this office at 3 p. m., August 28, 1922, for remodeling in the United States Post Office, Raleigh, N. C. Drawing and specifications may be obtained from the Custodian of the building or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect. Architect

Bids close August 14, 1922.

\$400,000 51/2 % Bonds
Clintwood, Va.
Sealed bids for the purchase of \$400,000 in Dickenson County Bonds, bearing interest at 51/2 %, payable semi-annually, bonds to run 10 years, with the privilege of the County to redeem bonds at any time after five years. Bids will be received up until 12 M., August 14, 1922. The County reserves the right to reject all bids if it thinks proper, and in that event said bonds may be sold at above date, at the Court House of Dickenson County, Virginia, at Public Auction to the highest bidder.

W. E. RASNICK, Clerk.

\$40,000 6% Bonds

Morehead City, N. C.
FOR SALE—Forty Thousand Dollars (\$40,000), 30-year, 6% bonds: Town of Morehead City, interest payable semi-annually authorized by special account of Legislature with authority to make public or private sale. For information write E. H. Gorham.

Bids close September 11, 1922

\$50,000 6% Water Bonds

San Benito, Tex.
Until eight o'clock P. M., September 11th,
1922 the City of San Benito, Tex. will
receive proposals on \$50,000 of Water, Electric and Sewer Bonds, serial 2 to 30 years
6% 6%.
For information address
CHAS. GREENSLADE, City Clerk.

Bids close August 22, 1922.

Bids close August 22, 1922.

\$200,000 5% Gold Bonds
CLARKE COUNTY, GEORGIA
Athens, Ga.
Sealed bids are invited for the purchase
of \$150,000 Permanent Road and Bridge
Bonds, and \$50,000 Bonds for Educational
Purposes in whole or in part, at the office of
Commissioners of Roads and Revenues of
Clarke County, Georgia, at 12 o'clock noon,
August 22, 1922.
Financial statement and full information
furnished on request.

furnished on request. TATE WRIGHT, Clerk and County Attorney.

Bids close August 15, 1922.

\$50,000 6% Road and Bridge **Bonds**

NOTICE OF SALE OF BONDS

NOTICE OF SALE OF BONDS

Sealed bids will be received up to two o'clock p. m., August 15, 1922. for purchase of \$50,000 Six Per Cent Coupon Bonds of Special Road and Bridge District No. 2. St. Lucie County, Florida. Bonds maturing one bond on July 1 of each of the years 1923, 1924, 1925 and 1926; two bonds on July 1 of each of the years 1927, three bonds on July 1 of each of the years 1930 to 1941, inclusive, and four bonds on July 1 of the year 1942.

Write to P. C. Eldred, Clerk, Fort Pierce, Florida, for full information.

\$17,000 School and Light Bonds

\$17,000 School and Light Bonds

New Brockton Ala.

Town of New Brockton offers for sale
\$17,000 School and Light Bonds. The issue and voted on June 26 and carried by
large majority. The issue runs 30 years
and carries a rate not exceeding 5%. Town
but New Brocton is a thrifty wide awake
little town located in Coffee County, Ala.,
on the Atlantic Coast Line railroad and is
entirely out of debt. not owing anything
for bonds or floating debt. The town carries a nice balance all the year 'round and
its management has been ideal for the past
12 years. The legal matters pertaining to
the election for the bond issue was handled
by one of the best attorneys in the State
of Alabama.

HON. E. M. DISMUKES, Mayor.

Bids close August 24, 1922.

\$40,000 5% Municipal Water and Light Bonds

\$500 DENOMINATION

Quincy, Fla., offers its 5% The City of Quincy, Fla., offers its 5% interest bearing bonds to the amount of \$40,000 serial bonds, \$2000 of same being payable and redeemable annually in sequence of their numbers beginning with number 117, July 1st, A. D. 1962 Interest payable semi-annually January and July first of each year after 1922. Sealed bids for the entire amount of City Electric Light and Water bonds will be received at the office of J. P. Smith, City Clerk, up to August 24, 1922, at 3 o'clock P. M.

A certified check or cashier's check for 5% of the amount of bid is required with each bid, and the right to reject any and all bids is reserved by the City.

(Signed) W. E. SHELFER.

President of the City Council of the City of Quincy, Fla.
(Signed) J. P. SMITH.

City Clerk.

City Clerk.

Bids close September 4, 1922.

\$150,000.00 6% General Municipal Bonds

Bonds

Plant City, Fla.

Bids close August 23, 1922.

Improvement of Second Street

Improvement of Second Street

Henderson, Ky.

Sealed proposals for Improvement of Second Street will be received by the Commissioner of Public Works and Property of Henderson, Ky. until 12 o'clock noon standard time on the 23rd day of August, 1922 for the improvement of Second Street of the City of Henderson, Henderson County, Kentucky, from the east margin of Water Street to the west line of the right-of-way of the Illinois Central Railroad Company a distance of 5115 feet to consist of paved carriageways, 18 feet in width on each side of the street, a curb along the center edge of these carriageways and a street intersections, catch basins with connections and inlets at intersections. Each proposal must contain the full name of every person or company interested in the same and must be accompanied by cash or a certified check made payable to the order of the City of Henderson, Ky., for a sum equal to five (5%) percent of the total amount of the bid, as a guarantee that contract will be entered into and proposals must be made on the complete work.

Requirements for Bidding and Instructions to Bidders, Form of Proposal, Contract, Specifications, Form of Bond and Plans may be obtained from the Commissioner of Public Works and Property of the City of Henderson or at the office of the Engineers, Pearse, Greelev & Hansen, 39 West Adams Street, Chicago, Ill., upon receipt of Fifteen Dollars (815.00) which sum so deposited will be refunded if said plans, specifications, etc. are returned in good condition within thirty days (30) after the opening of bids. CITY COMMISSION OF HENDERSON, KY.

Bids close August 15, 1922.

Street Paving

Gainesville, Florida.

Gainesville, Florida.

Bids will be received by the City Council of the City of Gainesville, Florida, until eight P. M., August 15, 1922, for paving certain streets in the City of Gainesville.

The proposed work includes approximately 85,000 square yards of paving with brick, concrete, sheet asphalt, bituminous macadam, or other material.

Specifications may be obtained from G. H. Cairns, City Manager. Certified check for Five Per Cent of amount of bid to accompany bid. The right is reserved to reject any or all bids. G. H. Cairns, City Manager.

Bids close Aug. 15, 1922.

Concrete Roads

STATE OF MARYLAND STATE ROADS COMMISSION NOTICE TO CONTRACTORS

Baltimore, Md.

Baltimore, Md.

SEALED PROPOSALS for building seven sections of State Highway, as follows:
GARRETT COUNTY—Contract G-22—One section of State Highway from Gortner toward Red House, a distance of 2.0 miles. (Concrete.)
FREDERICK COUNTY—Contract F-56—One section of State Highway from Middletown toward Myersville, for a distance of 2.03 miles. (Concrete.)
MONTGOMERY COUNTY—Contract M-36—One section of State Highway along Flower Ave, from Carroll Ave. to Blair Road, a distance of 1.0 miles. (Concrete.)

Flower Ave, from Carroll Ave, to Blair Road, a distance of 1.0 miles. (Concrete.)

HARFORD COUNTY—Contract H-28—One section of State Highway along the Phila. Road from Aberdeen toward the Baltimore County line, a distance of 2.0 miles. (Concrete.)

SOMERSET COUNTY—Contract S-16—One section of State Highway from Marion toward Tulls Corner, a distance of 1.5 miles. (Concrete.)

WORCESTER COUNTY—Contract WO-27—One section of State Highway from Bishop to Bishop tille, a distance of 1.8 miles. (Concrete.)

HOWARD COUNTY—Contract HO-25—One section of State Highway from the Columbia Pike near Ellicott City toward Pfeiffer's Corner, for a distance of 1.5 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Md., until 12 M., Standard Time, on the 15th day of August, 1922, at which time and place they will be publicly opened and read.

Bids must be made upon the blank prossal form which, with specifications and

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted. No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

General Assembly occurracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 27th day of July, 1922.

L. H. STEUART, JOHN N. MACKALL,

Chairman.

Bids close September 5, 1922.

Water Works Improvements

Richton, Miss

Richton, Miss.

Sealed proposals will be received by the Water Works Committee, Richton, Miss., until two o'clock P. M., Tuesday, September 5th, 1822 and then publicly opened for furnishing all Labor and Material required to install approximately 3200 Ft. 6" Cast Iron Water Pipe, 6300 Ft. 4" Cast Iron Water Pipe, 14 Fire hydrants and valves and cutouts. A certified check or deposit of \$400.00 is required with each proposal. A Bond for full amount of sum bid in proposal is required with notarial contract. Proposals will also be received to furnish Labor and Material required for above separately. The right is reserved to reject any and all bids and waive informalities. Plans and specifications are on file with Water Works Committee, Richton, Miss., and will be furnished to prospective bidders upon application to

GUS ROUFF.

Chairman.

Bids close September 5, 1922.

Water Works Plant Improvement

NOTICE TO WELL AND PUMP CONTRACTORS

TRACTORS

Brookhaven. Miss.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Brookhaven. Miss., on or before eight (8) P. M.. on Tuesday the 5th day of September, 1922. and then publicly opened, for furnishing all materials and equipment and constructing certain water works improvements for the said City in accordance with specifications on file in the office of the Mayor of the City of Brookhaven. Miss.

The proposed improvements will consist of the furnishing and installation of a water well and pumping equipment, electric motors and control apparatus, piping and valves.

motors and control apparatus, piping and valves.

Each proposal must be accompanied by a certified check for three (3%) per cent of the amount of bid, made payable to Hon. F. A. Cameron, City Clerk, Brookhaven, Miss., as evidence of good faith. Specifications, form of proposal, and contract may be seen at the office of the Clerk, City Hall. Brookhaven, Miss., or specifications will be malled upon application to the Consulting Engineers, The Kramer Engineering Company, Magnolla, Miss.

The right is reserved to reject any and all bids, and to waive all formalities and to make such award as in the opinion of the Board is to the best interest of the City of Brookhaven, Miss.

R. BUTLER, Mayor, F. A. CAMERON, Clerk. THE KRAMER ENGINEERING CO., Consulting Engineers,

THE KRAMER ENGIN Consulting Engineers, Magnolia, Miss.

Bids close August 29, 1922.

Water Works Improvements

Charlotte, N. C.

Charlotte, N. C.

Sealed proposals will be received by the
Mayor and Clerk of the City of Charlotte,
N. C. until eleven o'clock A. M., on Tuesday, the 29th day of August, 1922, for
Water Works Improvements.

The work will embrace a Mechanical Filtration Plant of reinforced concrete having
an approximate capacity of eight million
(8,000,000) gallons per day; Tower and
Tank having a capacity of one million (1,000,000) gallons; Surge Tank; Wash Water
Tank; Centrifugal Pumps and Filtration
Equipment with reinforced concrete Clear
Water Basin of three million (3,000,000)
gallons eand Mixing Chamber and Alum
Storage House.

Storage House.
Plans and Specifications are on file with the City Clerk at Charlotte, N. C. and with Engineer at Durham, N. C. and blank forms of Proposal, Specifications, etc. may be obtained from the Engineer without charges.

be obtained from the Engineer without charge.

Those desiring prints either in full sets or separate prints can obtain same by paying the cost of the prints.

Certified check for five per cent (5%) of the amount bid for such items for which a proposal is made must accompany all proposals.

The right is reserved to reject any or all bids.

EDGAR READ, City Clerk. J. O. WALKER, Mayor.

Engineers:
WILLIAM M. PIATT.
Durham, N. C.

Bids close August 24, 1922.

Water and Power Improvements

Quincy, Fla

Quincy, Fla.

Sealed proposals will be received by the City of Quincy, Fla., at the Clerk's office until 3 P. M., August 24, 1922, for the furnishing of all equipment, machinery, labor and material for improvements to the Water and Power Plant of the City of Quincy, Fla. including foundations, piping, the following list of machinery all furnished delivered, erected, ready for operation.

The equipment to be as follows:

One unaflow engine direct connected to one 210 K. V. A. 225 R. P. M. two phase, 2200 volt alternator, and as an alternate unit direct connected to a 312 K. V. A. 200 R. P. M. alternator, 120 pound steam pressure.

One three-panel switchboard.

One 1000 gallon centrifugal pump and motor and one 500 gallon centrifugal pump and motor, both 190 foothead.

One 500 H. P. feed water pump and heater. One motor driven air compressor, 600 cubic feet.

One surface condenser. One 200 H. P. boiler, 125 pound pres-Specifications will be furnished on re-

Specifications will be furnished on request.

Each bid must be accompanied by a certified check on a bank satisfactory to the City Council for bidder's bond for 5% of the amount of the bid.

A bond in the sum of 25% of the amount of the contract will be required for the faithful performance of the work.

Coples of plans and specifications may be seen at the office of the City Clerk or at the office of the Engineers, Atlanta, Ga. Copies may be obtained from the Engineers on deposit of \$5.00 which will be refunded to bona-fide bidders on return of plans and specifications.

specifications.

The City reserves the right to reject any and all bids.

J. B. McCRARY ENGINEERING CORP.,
Engineers.

CITY OF QUINCY, FLA, W. E. SHELFER, Prest. Council. J. P. SMITH, Clerk Council.

Spavinaw Water Project PRELIMINARY NOTICE TO CONTRACTORS

Tulsa, Okla.

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Tulsa, Okla.

The Water Commission of the City of Tulsa, Okla., contemplates receiving proposals during the last half of September, for the construction of the Spavinaw Water Supply Project, for which \$6,500,000 bonds have been voted.

The work contemplated consists of a masonry and earth dam 50 feet high, 25 miles of 60-inch and 25 miles of 54-inch pipe, a 78-inch tunnel 7000 feet long, a \$50,000,000 gallon storage reservoir, a 10,000,000 gallon high pressure reservoir, and approximately 7 miles of cast iron or steel force mains.

Plans and spacefacetics.

approximately 7 miles of cast iron or steel force mains.

Plans and specifications will not be eatirely completed before August 15, but are now far enough advanced for contractors who contemplate bidding to look over the work. The engineers for the project are prepared to show intending bidders the location of the various works upon the ground and to give detailed information. Contractors contemplating inspecting the work should notify the engineers as far in advance as possible.

Formal notice to contractors will appear in this publication upon the completion of the plans.

In this publication upon
the plans.

TRAMMELL & HOLWAY, Engrs.,
329 Kennedy Building,
Tulsa, Okla.

DABNEY H. MAURY, Consit. Engr.,
Chicago, III.

The Water Commission
of the City of Tulsa.
T BUIDD. Chairman. By A. J. RUDD, Chairman.

Bids close August 17, 1922.

Electric Light Plant Extensions Easton, Md.

Notice is hereby given that sealed proposals will be received by The Easton Utilities Commission of Easton, Md., until 2 o'clock P. M., on the 17th day of Augus, 1922, at the office of said Commission at Easton, Md., for the furnishing of the materials and equipment and for the erection of additions to the present electric light plant, including Turbine-Generator, Exciter Set, Switch Board, Condenser, Spray Nozles, Cooling-Pond, Cooling Tower, Excavation, Concrete Work and Electric Construction.

zies, Cooling-Pond, Cooling Tower, Excavation, Concrete Work and Electric Construction.

Specifications, plans, information for bidders, forms of proposals, contracts and forms of bonds required and other information can be obtained from the secretary of The Easton Utilities Commission, Easton, Md., or from Carl J. Kiefer, Consulting Eagineer, 810 Fourth National Bank Building Cincinnati, O., upon the deposit of \$5.00, which will be refunded upon the return of the specifications, plans, etc.

Also sealed proposals will be received for supplying Delsel or Semi-Delsel generating equipment, to operate in parallel with the existing steam engine driven generators, provided such proposals be accompanied by the stipulated forfeit, and provided further that such proposals be accompanied with complete specifications. Plans and all necessary drawings for the installation of the now proposed equipment, together with plans for the installation of future additional equipment.

The Easton Utilities Commission reserves the right to reject any or all bids.

THE EASTON UTILITIES COMMISSION, By John S. McDaniel, Secy.

By John S. McDaniel, Secy.

enjoy blow a sion ra agent. for you mer li Opp. P Tampa,

FARM COM



MINERAL AND TIMBER LANDS WATER POWERS, MISCEL-LANEOUS PROPERTIES.

FOR SALE—6642 acres of land in southwest Texas at \$2.25 per acre in fee, all cash. This is unimproved ranch and mineral land located about 12 miles from famous Shafter Silver Mine. An excellent, safe investment with wonderful possibilities. D. C. EARNEST, Dallas, Tex.

TIMBER-OIL LAND

526,000 acreg. 3½ billion feet 60% long leaf yellow pine. Probably finest virgin tract of anything like its size in North America. Oil seeps at several points on tract. Price \$1.50 per acre. Address 6054, care Manufacturers Record, Baltimore, Md.

BRICK AND TILE CLAY

Brick and Tile Clay for sale—61 acres; two miles largest city North Carolina; N. & W. Ry.; concrete road. This location will save \$3.00 thousand transfer cost; wonder-ful opportunity. Geo. D. Hodgin, Winston-Salem, N. C.

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FULLERS EARTH

FULLERS EARTH

I have 200 acres land underlaid with good grade Fallers Earth. Overburden from 5 to 14 feet Fullers Earth 26 to 30 feet depth, ½ mile to T. & I. R. R., for sale. B. S. Quarterman, Morriston, Fla., R. F. D. 1, Box 54A.

COAL LANDS AND MINES
FOR SALE—Going coal mines—coal, oil
and gas lands—timber tracts. Reports made
on same anywhere. E. H. Morris, Box 518,
Charleston, W. Va.

For Sale or Lease—2000-acre West Virginia coal land.

O. D. Hill,

Kendalia, W. Va.

FOR SALE—A very attractive timber proposition of 25 million feet of virgin long and short leaf pine and 3½ million feet of bardwood, located in Macon County, Ala., 6 miles from railroad. Shipping point on W. of A. 8-zboard, and C. of Ga. railroads. Price \$3.00 per thousand stumpage. For further information apply to Box 242, Bessemer, Ala.

FOR SALE—40,000,000 feet virgin hardwood timber, 4500 acres in Swain County, N. C., within 1½ miles railroad. Finest quality big soft yellow poplar, mountain oaks, basswood, ash, cherry, maple, chestnut and hemlock. In two rich coves, all down grade to mill site. Native labor plentiful. Unexcelled as an investment. Savage Bros., Murphy, N. C.

36,000 acres hardwood. Louisiana; on railroad; finest tract in South. Cut 300 million feet; half oak. \$27.50 per acre in fee. W. T. Kime, Grandview, Mo.

11,200 acres Colorado farm and cattle ranch, \$30 acre. 10,240 acres Florida muck, richest land, \$15 acre. 83,000 acres Florida Virgin pine, \$10.50 acre. 429,000 acres Old Mexico, magnificent oak, pine and valley, \$5 cents acre. A. M. Riedesel, Denver, Colo.

FOR SALE—5000 acres land with timber, something like 10,000,000 ft., about 3 miles of a thriving seaport town. Highway through it. Can be bought for little over half the surrounding lands are bringing. Address Box 264, Raleigh, N. C.

FARM FRUIT, AND TRUCK LAND

COME TO FLORIDA this summer, and enjoy a real vacation, where the breezes blow all the time. Summer resort excursion rates: inquire of your local railroad agent. We have a home, grove or farm for you. Send for booklet and 1922 summer list. Tampa-West Coast Realty Co., Opp. Post Office, "Since before the War", Tampa, Fla.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement centerins a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postofice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 25c. per line; 300 lines, 26c. per line; 500 lines, 26c. per line; 500 lines or more, 35c. per line.

FLORIDA

INVESTMENT BARGAIN—2000-acre highly improved farm ranch, equipped with modern buildings, machinery, stock, hogs, etc. close to market, on railroad; lath mill, and turpentine still. A money maker, sacrifice for \$135,000. G. E. Gage, 21 Blum Building, Jacksonville, Fla.

NERRASKA

Improved farms and ranches at pre-war prices. Location, climate and water excelent. Tax Free Real Estate loans at attractive rates. Write for descriptive list and prices. Boyles & Dillman, Investment Bankers. McCook, Nebr.

NORTH CAROLINA

FOR SALE—140-acre farm, facing hard surfaced state highway 8 miles of Wilmington, N. C., half cleared suitable for trucking fruit and stock raising. Good local market for vegetables and dairy products. Near ocean and can secure sound frontage. A bargain at \$40 per acre. A. M. Blake, owner, P. O. Box 1164, Wilmington, N. C.

LIFETIME OPPORTUNITY—COUNTRY farm home; 69 a.; 2 mineral springs; 5-room bungalow; outbuildings; orchards; immediate possession. BROWER, Mount Airy, N. Car.

SOUTH CAROLINA

Truck farms that pay dividends annually can be bought at reasonable prices here. Vegetables are shipped eight months in the year. Three and four crops are grown on the same land annually. Excellent climate and health. Plenty of labor; strikes unknown. Well organized association that sells all farm products. For particulars write. Lake Realty Company, Beaufort, S.C.

RICH black land farms; well drained; oil, fruit; nature's sanitarium; Gulf Coast; rain belt, hard road; free booklet. Charles Harper, Port Lavaca, Tex.

VIRGINIA

COLONIAL RIVER ESTATE—Rich farming land; historic brick mansion visited by many notable personages; built in 17th century upon terrace facing many miles of river. Grounds of great beauty, Mansion and out-buildings in perfect condition. Electric lights; modern plumbing and heating; finest artesian water. Convenient location. Fine roads. Rare antique furniture. Estate cheap at \$100.000. Can be bought for much less. Box 889, Richmond, Va.

BUSINESS OPPORTUNITIES

If interested in the
BEST SECTION OF THE SOUTH
If you want a Cotton Mill,
or Southern Mill Stocks
or Investment in Central Real Estate
Large Suburban Development property
or a Manufacturing Site
Address

Address
F. C. ABBOTT & COMPANY
Trust Building, Charlotte, N. C.

BUSINESS OPPORTUNITIES

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building,
Alexandria, Va.

Colorado Building,
Washington, D. C.

FOR SALE

The ice plant, bottling works, grocery store and meat market, known as "Crowley's" belonging to the estate of Sarah A. Sullivan, on the northeast corner of Front and King Streets, Georgetown, S. C. All in operation now. Selling preparatory to winding up estate. For particulars write to:

W. D. MORGAN, Executor
Estate Sarah A. Sullivan

MIAMI, FLORIDA

MIAMI, FLORIDA
The MAGIC City
Apartment House For Sale—New reinforced concrete building, 24 apartments of 2 and 3 rooms each with private bath, all nicely furnished. Owner is sacrificing below cost, as he is called away from the City. Price and terms on application. Write J. L. Kelley Realty Co., 47 Real Estate Bldg., Miami, Fla.

FOR SALE—By owner, family hotel, 6 miles south of Palm Beach, the fastest growing town on East Coast. For particulars address New Jersey Hotel, Lake Worth, Fla.

ANNOUNCEMENT

ANNOUNCEMENT

We desire to notify you that we have associated ourselves together to render Emicient, Confidential Service to Bankers, Lawyers, Steam and Electric Railways, Merchants and Industrial Corporations under the name of—
COMMERCIAL-RAILWAY & INDUSTRIAL COMPANY
(C. R. & I. COMPANY)
General Offices: 437-A Equitable Building, Baltimore, Md.
SILENT PHONE, PLAZA 1-9-8-5
Mr. H. KENT MCCAT, former City and Harbor Engineer of Baltimore and recently of the Construction Corps of the U. S. Navy will have charge of the office and financial details of this company,
Mr. J. P. GRAHAM, former District Manager of the Railway Audit and Inspection Company (Baltimore Branch) will be in charge of the field work.
We are confident that this combination will give our clients most excellent results and we promise the utmost co-operation.
We solicit your business.
COMMERCIAL-RAILWAY & INDUSTRIAL COMPANY
H. K. McCAY, President
J. P. GRAHAM. Vice-President
A SELECT CLIENTELE OUR AIM

Interest open in Marine Transportation and Commission Company. Business enough from South to earn \$300,000 Net Annually. 25% on capital invested. Alfred S. Perry, Perry Building, Fairfield, Conn.

WANTED—Wholesale Lumber man with established hardwood trade to furnish cap-ital to operate tract of 75 million feet virgin hardwood, mostly oak. On percentage basis. None but responsible parties need reply. Box 65, Webster Springs, W. Va.

Investor to trade in building cotton mill; 1762 acres for location; fifty thousand or more starter. Chas. Harper, Port Lavaca, Texas.

FOR SALE—Automobile accessory business; well established; doing a good business; good location; city of 12,000 population; invoiced \$5000. Box 523, Dothan, Ala.

WANTED—Active partner to go in dairy business, raising thoroughbred Jersey cattle, and manufacturing Ice Cream. Am at present operating small dairy, have 670 acres first-class land, 300 acres cultivated, have water power site developing 25 H. P. already developed on property. Don't reply unless you have as much as \$25,000.00 to invest. D. D. Smith, Quincy, Fla.

FINANCIAL

WANTED—\$40,000 to complete building of church; pay 6% interest, reasonable brokerage. Membership pledged 55,000; 40% already collected. Old church building and new lot worth \$20,000. Membership 400; financial responsibility good for at least quarter million dollars. New church building will cost \$100,000. If interested write W. E. Robinson, Chairman, 183 East 12th St., Dallas. Tex.

BONDS—Have buyers for manufacturing, mercantile, industrial, Mining; entire issues. A. W. Johnson, 212 Mass Bidg., Kansas City, Mo.

COLLECTIONS

COLLECTIONS
MERRIAM,
507 FIFTH AVENUE,
NEW YORK CITY

PATENT ATTORNEYS

INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book. "How to Obtain a Patent" sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chandlee & Chandlee, 412 7th St. N.W. Washington, D. C.

PATENTS, TRADE-MARKS AND COPY-RIGHTS—Write for our Free Illustrated Guide Book and EVIDENCE OF CONCEPTION BLANK, Send model or sketch and description of your invention for our popinion of its patentable nature free. Highest references. Prompt service. Reasonable terms. Victor J. Evans & Co., 712 9th St., Washington, D. C.

PATENTS—Booklet free. Highest references. Best results, Promptness assured. Watson E. Coleman, Patent Lawyer, 624 FSt., Washington, D. C.

JACK A. SCHLEY.
Patent and Trade-Mark Attorney.
306 Interurban Bullding. Dallas, Tex.
319 McGill Bullding. Washington. D. C

INDUSTRIES WANTED

We want a manufacturer or industry employing labor to locate at Jacksonville, Fla.

We have 60 acres land on railroad and close to deep water on St. Johns River; brick streets, electric current, both power and lighting, water works system and street cars: three immense warehouses; housing facilities for 40 families.

Will make any reasonable concession to responsible parties. Will give long lease at nominal rental. sell at very low figure or might consider stock in satisfactory enterprise. P. O. Box 48, Jacksonville, Fla

CEMENT PLANT

A location in South for cement plant.
All raw materials, including best steam
coal, on property free of freight charges.
Can make attractive offer to principals.
W. A. Patton, Engineer, Coalmont, Tenn.

FACTORY SITES

BALTIMORE

FACTORY

SITES

William Martien & Company.

1413 Lexington Bldg.

Paltimore. Md

INDUSTRIAL PLANTS

FOR SALE—Plant for manufacture of Automobile Tires and Tubes; 70% of machinery now set and in building which is constructed of brick, complete steam plant ready for operation; four-acre site; wonderful opportunity. Address J. A. Parker, Gulfport, Miss.

INDUSTRIAL PLANTS

FOR SALE—Fully equipped up-to-date Bottling Plant. Double head Shields bottling machine and new Miller-hydro soaker and washer. Completely equipped with bottles, cases and motor trucks, etc. Located in Guyan Valley non-union coal fields at the mouth of Buffalo Creek, Man, W. Va. Just ready to start operating. Reasonable terms to right party. Great opportunity. Write George H. Williamson, Atty., Citizens National Bank Bldg., Charleston, W. Va.

FOR SALE OR LEASE—Manufacturing site; 25 acres, Elkridge Md.; on Patapsco River; about 180 H.P. developed; good buildings; partly equipped; main line B. & O. Address R. W. Kime, Salem, Va.

FOR SALE—One Midget Marvel Flour Mill complete, capacity fifty barrels. This mill is new; cause of sale, no wheat raised here. Pat H. Wheat, Lonoke, Ark.

FOR SALE

Two Business Properties
at Highlandtown, Baltimore.
Improved for any manufacturing or development purpose, with power house and refrigeration at option of purchaser.

Situated as follows:
(1) Lot 120 feet front on Eastern Ave., through to Fleet St., and 120 ft. front on Fleet St., with four-story brick buildings ready for use.
(2) Lot 66 feet frontage on Third St., by 379 feet fronting on Bank St., improved by brick buildings.
Both properties immediately available, can be bought separate or as a whole.
Apply to The Wm. Schluderberg-T. J. Kurdle Co., Baltimore and Fifth Sts., Baltimore, Md.

Water Power Site for sale; one of the oldest feed mills in northern New Jersey, has been in the family since 1865; 50 miles from New York, State road, railroad and electric light and power line along property. 10 acres. Frank Dufford, Middle Valley N. J. Morris County.

FOR SALE—Large Steam Laundry Plant (Virginia) with or without the Real Estate, on prominent corner, brick building. Being sold for mortgage by bank and will arrange easy terms. Wheeler & Co., Real Estate Brokers, Newport News, Va.

FOR SALE—Machine Shop & Foundry in north Florida city of 7000 population. Now doing 50 to 60 thousand dollars yearly. In the Heart of the Yellow Pine Belt of Florida. Have fine trade with saw mill mining and railroad industries. Well established, having been in successful operation for twelve years. Reason for selling is other interest in another state requiring the owner's attention. Will sell in whole or will sell machinery and supplies and will give long time lease on buildings which are new and modern. Have never had any labor troubles. Address Owner, No. 6055 care Manufacturers Record, Baltimore, Md.

One complete Quarry Plant, has contracts on hand, is making money, this plant is located in the South. Price, etc., on ap-plication. James Carroll, 917 Wainright Bldg., St. Louis, Mo.

LUMBER AND BUILDING MATERIAL

Direct Mill Prices on

LUMBER

You can effect big savings on genuin-long leaf Flooring, Ceiling, Siding, Sheath ing, Moulding and cut-to-length Framing by ordering direct from the producing field Complete bills, gnaranteed grades and workmanship, Submit schedule for delivered price, The Dimension Co., Lockhart, Ala

MEN WANTED

Salesmen for Southern States, who call on oil mills, gins and industrial plants to sell "Master-Grip" Pulley Covering on liberal commission basis. Exclusive terri-tory to men who travel regularly. Master-Grip Manufacturing Co., Austin, Tex.

WANTED-Experienced man for Reverberatory Furnace and White Metal Plant. Good job to right party. Write to Bostwick-Lyon Bronze Co., Waynesboro, Pr.

MEN WANTED

"EXECUTIVES and men of proven abuity seeking positions find our service extremely satisfactory. Our Mr. H. H. Harrison can confidentially negotiate for you suitable connections as he has done for thousands of others since 1990. Inquirles invited. The National Business Bourse, Inc., Association Building, Chicago."

A LEADING ORGANIZATION desiring to fill an important position, for obvious ethical and other reasons, cannot invite directly the candidacy of any particular man. Similarly, no well-connected man will exploit personally his own qualifications, he matter how receptive he may be to overtures. The undersigned has been retained by a national clientele for many years, as a medium for negotiating preliminaries is such cases, Your permission to send bookles discussing this problem and describing the service, will in no degree obligate or compromise you. Strictly confidential, R. W. Bixby Inc., 303 Lockwood Bidg., Baffalo, N. Y.

FORD CAR necessity: top shock absorber; every Ford owner will buy. Sample set \$1. Agents wanted. Exclusive territory. Write today. Lights Mail Order House, Box 127, Birmingham, Ala.

WANTED-An experienced moulding mawan ted—An experienced moduling ma-chine operator, an experienced cutter and also an experienced yard foreman to take in and fill orders. Apply King Lumber Company, Charlottesville, Va.

WANTED—In the principal city of each state, an established concern who can represent, on a commission basis, a long established firm fabricating steel for concrete reinforcement and accessories. Reply in detail, giving commercial references. Electric Welding Company, Century Building, Pittsburgh, Pa.

MERCHANDISE WANTED

SPOT CASH for surplus merchandis-job lots, close-outs, discontinued lines, goods-ordered and left-to-n-hand, etc. (no ma-chinery). No quantity too large, Quick cash for real hargains, Fautus Fros., 1318 Cakley Ave., Chicago, III.

MACHINERY AND SUPPLIES

Back enamel paint in 50 gal, bbls. White and green enamel in 5 and 10 gal, drums. Gov't stock. Will sell cheap. Pratt Thomp-son, 220 E. Lexington St., Baltimore, Md.

SAW MILL FOR SALE—Complete circular saw mill; steam feed, steam nigger, steam leader, Surry Parker skidder, sidatrimmer, dry kilns, engines, boilers, generators, logging cars and locomotives, gears, pulleys, shafting, boxes and belt.

Wm. A. Peschau, Box 1143,
Wilmington, N. C.

FOR SALE—Six Heil Gravity Dump Steel Bodies for Ford Trucks. One cu. yd. capacity. Used only a few months. Sixty Dollars each. Cooper Construction Co., Tupelo, Miss.

FOR SALE—One No. 4 J. C. Steele & Son pug mill; one La Crosse tractor with disc plow and binder hitch; also 40 feet of 36-in. diameter smoke stack, all in good condition. The reason for selling, have changed our equipment at our brick plant. For further particulars address Victor Cushwa & Sons, Williamsport, Maryland.

4—Three wheel ten ton rollers.
2—Five ton Tandem rollers.
1—Byers Auto Crane on Caterpillar tread.
75 H. P. Double drum Reversible Engine, 100 H. P. Erie Boller.
2—Elevating Graders.
6—Troy Dump Wagons, practically new. James Carroll, 917 Wainright Building, St. Louis, Mo.

AIR COMPRESSOR AND WATER SYSTEM AND MACHINERY FOR SALE. Air Compressor complete, 788 cubic feet air per minute, 130 horse motor; plughandle and dowell machines; 40" adjustable band saw, 15 horse motor; fire protection water system, 30,000 gallon tank, steel tower, centrifugal pump 750 gallons per minute, two stage, 75 horse motor, hydranta and hose; 15 acre water front plant and buildings—for sale separately or as a whole. Box 29, Richmond, Virginia.

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SPECIAL ADVERTISEMENTS OF GENERAL INTEREST

Have You Ordered Your Blue Book of Southern Progress

Single Copies 50c Manufacturers Record, Baltimore, Md.

Modern Fertilizer Mixing Plant

Brand new, suitable for other purposes with small additions. Size 144 by 200 feet. Good track facilities,

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POTOMAC MILLING & ICE COMPANY KEYSER, WEST VIRGINIA



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OFFICE LOWELL MASSACHUSETTS

UNDER AUTHORITY OF A DECREE OF A REFEREE IN BANKRUPTCY IN THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS, THE SALE OF THE PLANT OF THE ROSS MACHINE COMPANY AT WOLLASTON MASSACHUSETTS HAS BEEN AUTHORIZED TO THE HIGHEST BONA FIDE BIDDERS AT ABSOLUTE PUBLIC SALE

IN LOTS TO SUIT PURCHASERS— FREE FROM ENCUMBRANCE

The property is comparatively brand new. Is on the opposite side of Old Colony Avenue from the main line of the Old Colony Division of the N. Y. N. H. & H. Ralirond. Is seven miles from the South Station Boston. Coal and fuel come by water or by raliroad track from the mines to Wollaston. Metropolitan Water Supply System of Massachusetts at the premises. Self respecting independent community. Free from iron strikes in thirty-five years. In all Massachusetts it is doubful if there is another location with so many single family houses owned by the workingman. Wollaston has increased 50% in population in twelve years. Eleven other plants of size and substantial quality and success in Wollaston. Seventy-four passenger trains between Boston and Wollaston daily. The real estate is in two lots. A remarkable lot of machine tools and precision machine tools and small tools and mechanical equipment and foundry equipment and forty tons of steel and iron and brass and metals and also stock-in-process all set forth in the catalogue in eleven hundred and thirty-three descriptive lots—all of quality and broad variety and exceptionally desirable features. The sale will take place upon the premises regardless of any condition of the weather on Wednesday the 18th day and on Thursday the 18th day of August 1922 commencing very promptly at half past ten of clock in the forenoon each day. An illustrated and descriptive lota-detail may be had upon application at the office of the Auctioneers, where all inquiries must be made. EDWARD P. BARRETT, Trustee in Bankruptcy Ross Machine Company.



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Many locations are well situated for manufacture and distribution to the South and Southwest and through the Port of New Orleans, as well as by the Pacific Coast through the El Paso Gateway.

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Dallas, Texas

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MANUFACTURER and DISTRIBUTOR

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A valuable plant for the manufacture of fish scrap and oil, situated near Milford, Delaware will be sold at public sale, by order of Court Thursday, September 7, 1922, at two o'clock, P. M. in front of the New Windsor Hotel, Milford, Delaware. For particulars address Henry Ridgely Esq., Dover, Delaware.

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One double-end Punch with motor attached. One end 12" throat—Equipped with Angle Shear Blocks—Capacity 8 x 8 x ½" Angle —Other end 24" throat—Equipped with Plate Shear 12" long—Capacity 3%" Plate. Might also be interested in No. 2 Bulldozer

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Two 66"x16", 100 HP, 125 lb. Horizon-tal return tubular boilers A.S.M.E.

code, new. -60"x16', 80 HP, 100 lb., Horizontal return Tubular Boiler, A.S.M.E.

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1-10"x11"x12" Laidlaw-Dun-Gordon Feather Valve Air Compressor, capacity 338 Cu. ft. per minute.

1—14"x14" Watertown center crank, enclosed frame automatic Steam Engine, 250 RPM, direct connected to 75 KW, 250 Volt, Westinghouse, D. C. Generator.

1—75 KW, 2300 Volt, 3-phase, 60 cycle, 900 RPM, General Electric Belted Generator, with 5 KW, 125 volt, 1800 RPM, Belted Exciter.

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1—Heavy Duty I. & E. Greenwald Engine size 17 by
42. At ½ cut off, 140 pound Boller pressure,
84 R.P.M. Indicated Horse Power 317.

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One Gardner Steam Separator. Engine and all
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B.P.M. motor.

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L-Laidlow-Dunn & Gordon Belt Driven Air Compressors, size 25" x 15" x 18"; capacity 750 cu. ft.

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pressor, size 25" x 18" x 18"; capacity 750 cu. ft.

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-16" x 8½" x 12" Duplex Steam.
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-12" x 7" x 10" Duplex Steam.
-10" x 6" x 10" Duplex Steam.
-10" x 6" x 10" Duplex Steam.
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TANKS

TANKS

6—Hot Water Feed Tanks, 48" dia., 10' long, with one convex and one concave head, manhole in head, about 4" plats, about 68" dia. 5' 6" high, with dished heads, 5" plats, 2—Open Top Storage Tanks, 10" wide, 4" 5" cleep, 10' 6" long; 7/16" plate.

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2—Open Top Storage Tanks, 10' wide, 3' 3" deep, 16' 3" long; 7/16" plate.

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2—Open Top Storage Tanks, 10' wide, 3' 3" deep, 16' 3" long; 7/16" plate.

3—Open Top Storage Tanks, 10' wide, 3' 3" deep, 16' 3" long; 7/16" plate.

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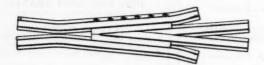
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These Hoists and Derricks are standard late models, manufactured by The American Hoist & Derrick Co., St. Paul, Minn. They are almost new, and every one is GUARANTEED to be in first-class running order.

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Mast.....16 in. square, 40 ft. high.

Boom..... Made of (2) 14 in. sq. timber 48 ft. long spliced to lengths of 80 ft. with (2) % in. and (2) 1% in. truss rods.

Stiff Legs. 14 in. sq. 55 and 60 ft leng. or 16 in. sq. 50 ft. long, will furnish either length desired, capacity 5 to 10 tons. Bull wheel 16 ft. dia. Principal sheaves 16 in. dia. and 14 in. single blocks.

The Cable which was fermerly used will be given with each purchase of a Hoist and Derrick.

These Hoists and Derricks are assembled on the Grounds at Hog Island and may be inspected at any time. This Equipment is being sold complete and in units of a Hoist or Derrick if desired. Immediate shipment can be made anywhere, but QUICK ACTION IS IMPERATIVE.

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THE ELECTRIC HOIST & DERRICK CO.

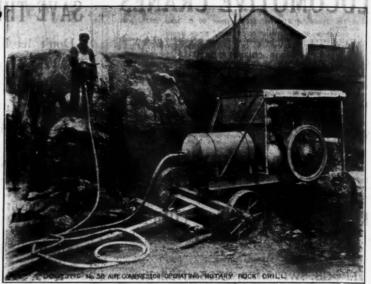
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19 paschare, New Yey? Skinner

Model 7
19 paschare, New Yey? Skinner

Model 8
19 paschare, New Yey? Skinner

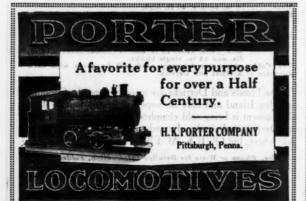
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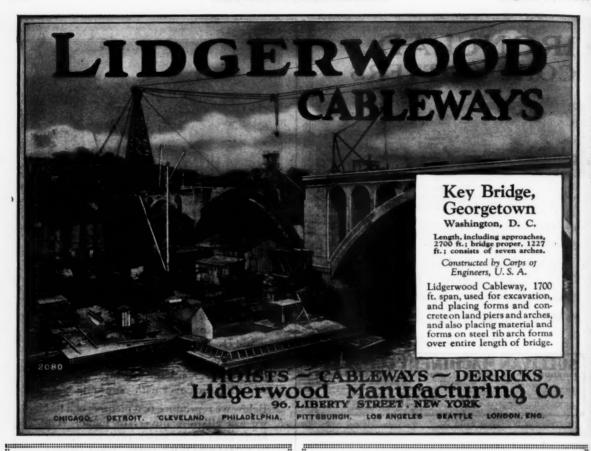
Goodrich "Commander" Pneumatic Hose

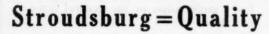


On "Commander" blade slips and slides - can't get a



Ordinary pneu-matic hose. No trouble to whittle off slivers from cover with knife.





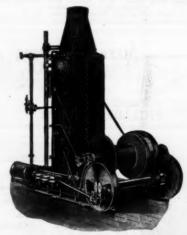
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Shown on Page 9 of our Catalog No. 16 71/4" x 10" Engines with a capacity of 200 per minute.
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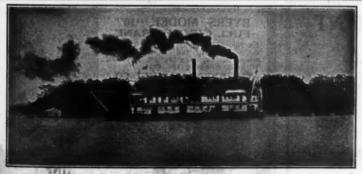
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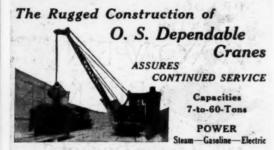
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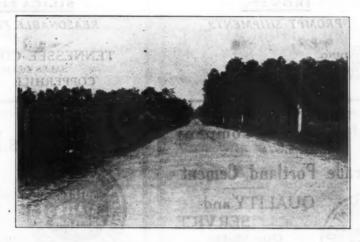
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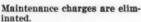
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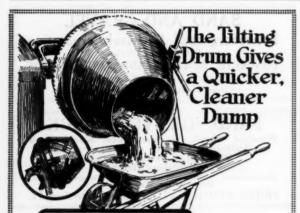
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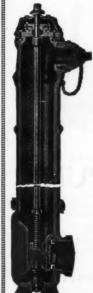
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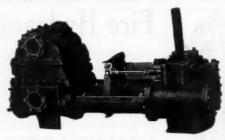
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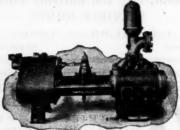
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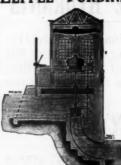
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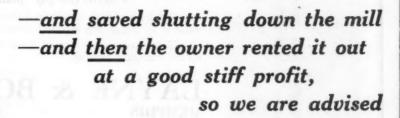


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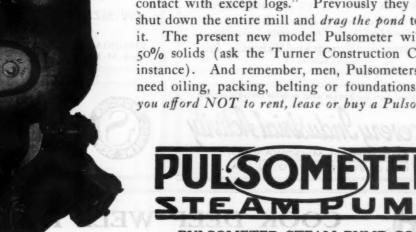
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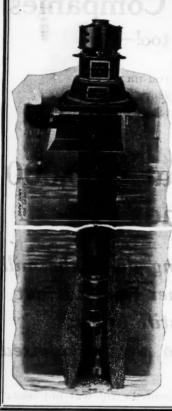
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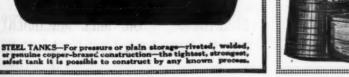
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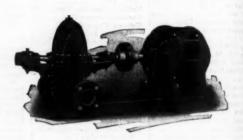
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